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Incorporating *International Commerce*

JANUARY 24, 1972

Commerce Today

Coming Developments in Business and Technology

FROM THE SECRETARY

A Key To Orderly Economic Growth

(This column was written by J. H. Wakelin, Jr., Assistant Secretary of Commerce for Science and Technology.)

Throughout history technology has had an important effect on men's lives. But today, the tools technology develops are more powerful than ever before.

Business and national leaders agree that we can no longer afford to let economic growth be defined only in terms of its contributions to our material standard of living.

Rather, as a nation we must know more about the impact of shifts in technology before we go too far with major investments and plans to introduce them.

Industry and government both profit from not developing policies and systems which are hostile to the environment in which they will operate. Forward looking business leaders have already added preassessment efforts to policy and program decision-making to improve their decisions relating to technology and pollution. Soon all major public and private organizations will make assessments of the impact of any potential innovation on other aspects of the social system.

Technology assessment is the term used to describe this type of planning. It could become the basis of national planning in decisions at all levels of private enterprise and government and in citizen and community groups. Because it develops data to evaluate impacts and to help make decisions with confidence, it provides a way for business and government to balance risks against benefits. Thereby, it is a potentially powerful planning tool.

Here is a key step to the way for American private enterprise to meet the challenge of achieving orderly industrial, economic, and social progress without creating undesirable side effects. It means we can plan our spending wisely with regard for business and human priorities, taking all of the factors into account before we commit ourselves to costly investments to launch new technologies.

Some examples of technology assessment already exist. For example, the Environmental Quality Act requires a technology assessment of issues involving the environment.

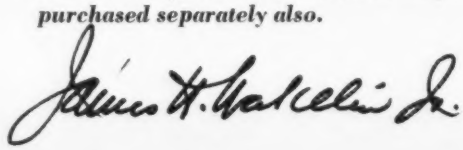
But, there are many inconsistent views on what technology assessment is . . . what it is for . . . where it should be placed . . . and how it would be used. And until now little had been done to answer these questions or to develop substantive methodologies.

President Nixon's concern with this challenge to American enterprise is illustrated by his Office of Science & Technology's development of standard methodologies for technology assessment through a series of case studies assessing the impact of technology in five major problem areas. The OST report, compiled by the MITRE Corporation, is now available to the general public from the Department's National Technical Information Service.

The OST study clearly defines technology assessment, illustrates the feasibility and limitations of the process, and demonstrates how to extend the process itself through further development by private industry, universities, and government.

The methodology described in these reports can provide the framework and context for U.S. business leaders to meet the conflicts between the needs to be met in our material standard of living and the need to maintain a healthy and aesthetic social and physical environment.

The report is available from the National Technical Information Service, Springfield, Va., 22151. The complete set costs $31.50 per copy in paper and $9 in microfiche. Each volume may be purchased separately also.



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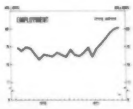

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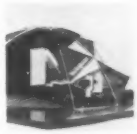

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COVER: *President Nixon addresses shipyard workers in California following the signing of a $54.6 million contract for construction of the first three steam oil tankers under Federal subsidy. "You're not just building another ship. You're building America," he told them. Andrew E. Gibson, Assistant Secretary of Commerce for Maritime Affairs, looks on at left. See story Page 4.*

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ECONOMIC
HIGHLIGHTS

Expanding Economy Generates More Jobs; Special Factors Affect Unemployment Rate

Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).

The expanding economy has been generating new jobs at a faster rate since mid-1971, and there are indications that this trend will continue during 1972. There is a particular need for a large increase in jobs at this time because demographic and other special factors have caused unusually rapid expansion in the labor force.

Employment increased by 1.7 million from December 1970 to December 1971, and most of this substantial gain was in the last half of the year. In fact, as the chart shows, the number of jobs increased every month from July to December.

While the economy was expanding to absorb this number of workers, the labor force grew rapidly and kept pace with the increase in jobs. Thus, the unemployment rate remained at approximately 6 percent.

The growth in the labor force over the past three years has been much faster than the long-term average. There are several important reasons for this. First, the reduction in the size of the Armed Forces over the past three years, which has been associated with the winding down of the war in Vietnam, has released 800,000 men for civilian pursuits. The number of men in uniform has been reduced from 3.5 million to less than 2.7 million.

Second, there is a disproportionately large number of teenagers and young adults in the labor force because of the high birth rates in the late 1940s and the 1950s.

Third, an increasing number of women are seeking jobs. This trend, which has been under way for decades, has been growing stronger in recent years. For example, in the past 10 years the number of females in the labor force has increased three times as rapidly as the number of males.

The unemployment rate has been affected by changes in composition of the labor force as well as changes in its size. Traditionally, unemployment rates for women and teenagers have been higher than the unemployment rate for adult men (for married men, the rate is only about 3 percent).

Thus, the larger proportion of inexperienced workers—youth and women—tends to raise the overall unemployment rate.

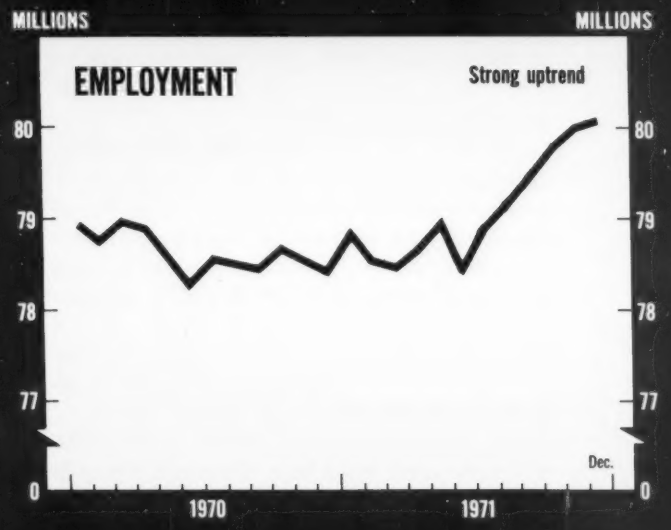
The expansionary trend of the economy, which has brought sharp gains in employment since mid-1971, is likely to accelerate in the months ahead and thereby reduce the unemployment rate. The most important gains in employment may occur in manufacturing, which has recovered only moderately thus far and now seems poised for a rapid catch-up period. Gains in the average hours worked per week in manufacturing have been substantial in the past two months. Increases in this indicator usually precede gains in employment. The breadth of this trend is indicated by the fact that increases in the average workweek have occurred in almost every major manufacturing category.

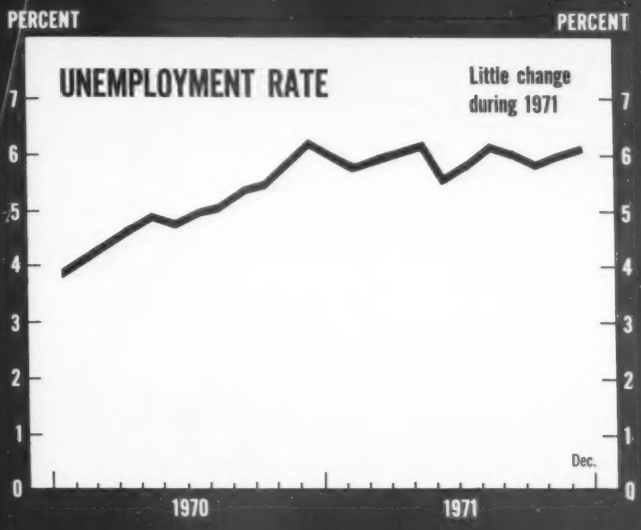
Thus, there seems little doubt that 1972 will bring further gains in employment, and as a result, there should be a significant reduction in the unemployment rate.

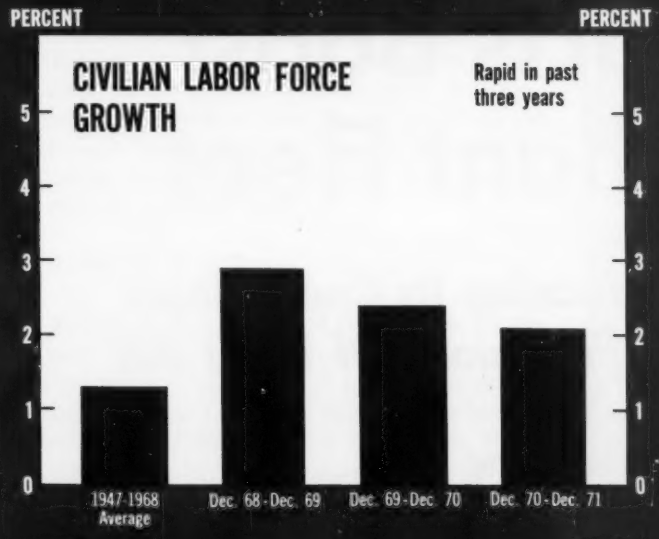
Other economic data

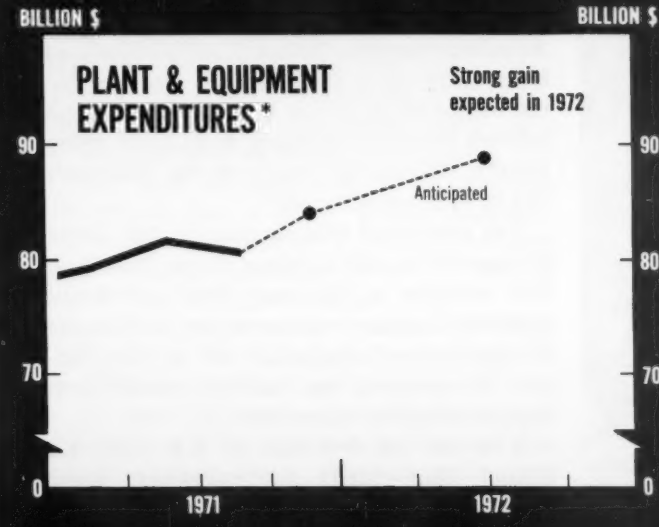
Spending on new plant and equipment should provide a major thrust to the economy in 1972. Businessmen have projected a 9 percent gain in a sector that has been sluggish for two years. Industrial production increased strongly again in December, including further gains in the production of capital equipment.

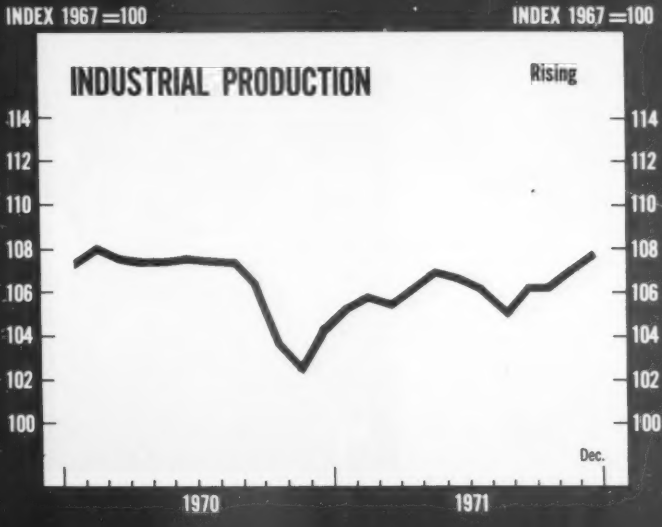
Latest Indicators











*Annual rates
All data seasonally adjusted

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January 24, 1972

Tanker Pacts Boost U.S. Merchant Fleet

Shipping Industry Increasing Its Capabilities Under New Subsidy Provisions Of 1970 Act

PRESIDENT AMONG FRIENDS—*A smiling worker holds his hard hat while President Nixon autographs it following the contract announcement in San Diego.*

"You're not just building another ship. You're building America." With these words President Nixon signified a major change for the American maritime industry, as he announced the signing of a $54.6 million contract for the construction of the first three steam oil tankers in a U.S. shipyard to be built under Federal subsidy, destined to fly the American flag in U.S. foreign trade.

The signing of this contract in San Diego this month for the building of the 38,300-ton bulk carriers at National Steel and Shipbuilding Company marks the first time in the 36-year history of subsidy aid by the Federal Government that building funds have been provided for oil carriers.

It is also the first time in U.S. shipping history that funds for operating these tankers in foreign trades against foreign competition have been approved. The con-

tract, additionally, is a clear indication of the success of the President's new maritime program to revitalize the U.S. Merchant Marine Fleet.

Historical first

According to Andrew E. Gibson, Assistant Secretary of Commerce for Maritime Affairs, who accompanied the President to San Diego for the historic contract announcement and signing, "This is the first time in modern history that a U.S. owner has been able to obtain a long-term charter for American flag operation in foreign trade."

"Prior to the Merchant Marine Act of 1970," said Gibson, "this innovation in the shipping industry would not have been possible. The vast implications this new approach in Federal subsidy has for the industry should not be underestimated."

What Gibson is referring to with these remarks, is the opening of the way for other shipbuilders and other ship operators to construct oil tankers that can compete in the foreign trade market and put the United States back into the "number one" position with its merchant fleet.

Another award

In a second decision Jan. 4 affecting American shipyards, the Department of Defense approved conditional contracts for the construction and charter of nine 25,000-ton tankers. Four of these ships are to be built at the Todd Shipyards in San Pedro, Calif., for a total price of approximately $66 million, and the other five ships are to be built at the Bath Iron Works in Bath, Me., for a total price of more than $80 million.

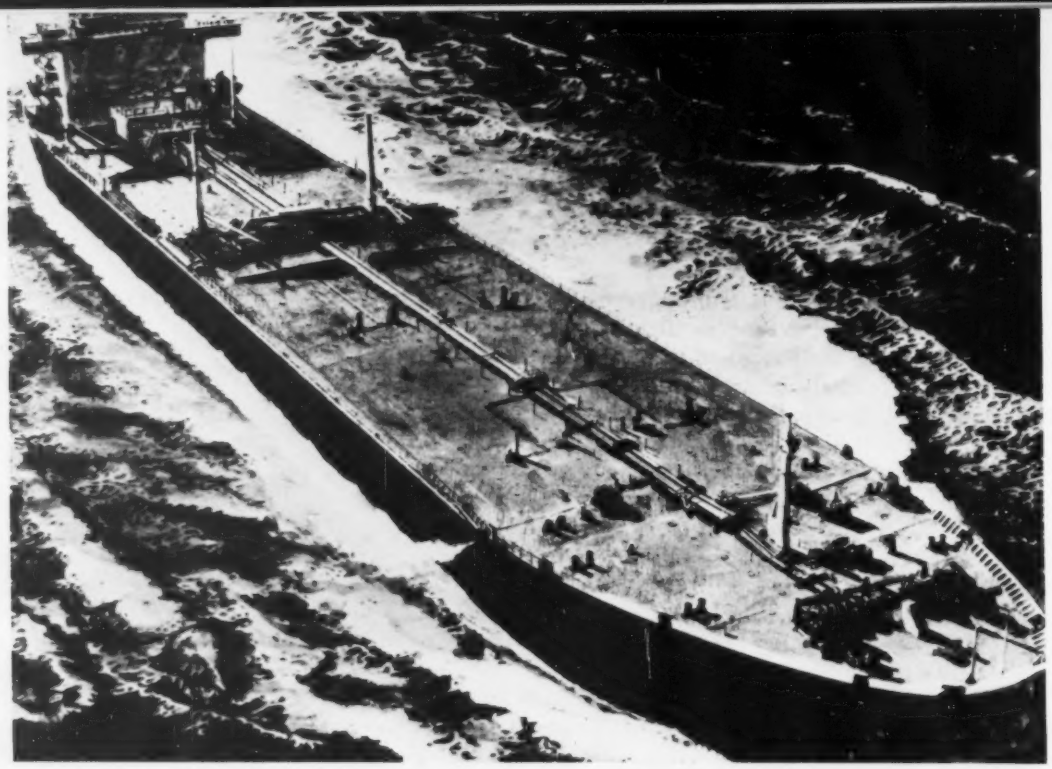
In addition, last week the Maritime Administration was able to announce a $350 million tanker project proposal, one of the largest commercial shipbuilding orders ever to be placed with an American shipyard.

The new application is from Maritime Dynamics, Inc., a newly formed Delaware corporation, requesting construction subsidy and mortgage insurance to aid in building six 225,000-ton supertankers.

The company would operate the ships under lease as American-flag carriers in world-wide liquid bulk service.

If approved, the project would provide 10,000 man-years of work for General Dynamics Quincy, Mass., shipyard, and a similar volume of employment in supporting industries.

BUILD SHIPS AND NATION—*President Nixon tells NASSCO shipyard workers of the new $54 million contract and reminds them their task is not just building ships but also building a better America.*



PROPOSED CRUDE CARRIER—*Six 225,000-deadweight ton tankers costing more than $350 million have been proposed for construction at General Dynamics' Quincy, Mass., Shipbuilding Division, pending approval by Commerce's Maritime Administration. Ships would be operated by Maritime Dynamics, Inc., a new company jointly owned by General Dynamics and Maritime Fruit Carriers Co. Ltd. Each tanker would be 1,094 feet long and would carry more than 65 million gallons of crude oil.*

Gibson said, "This proposal demonstrates the viability of President Nixon's maritime program which provides greater flexibility for the ship owners, shipbuilders and investment community to reach accord on shipbuilding projects."

To be delivered in 1974 and 1975, each of the supertankers will have the capacity to carry more than 65 million gallons of crude oil, a length of 1,094 feet, a 144-foot beam and a 16-knot speed.

Another proposal

Further evidence of the increased activity in the shipbuilding industry was forthcoming when the day following the supertanker application the Maritime Administration received another subsidy proposal for four 19,000-ton roll on-roll off ship from the State Steamship Co. of San Francisco, Calif., representing a total cost of $34.9 million.

If approved, when delivered these ships will be used in the U.S. Pacific Coast-Far East service. The ships each will measure 684 feet long, and have a draft of 32 feet and a speed of 23 knots.

The advantage of the roll on-roll off ships is that not only can they handle regular containers of all sizes, but they are equipped to carry cargo considered difficult to handle; such as, long lengths of lumber and odd-sized cargos that do not generally have container capabilities.

Moreover, in addition to their flexibility to carry containers and breakbulk tonnage, the ships can be loaded and unloaded rapidly, by ramps which allow cargo to be driven or wheeled on board for stowing.

Until the enactment of the Merchant Marine Act of 1970, which incorporates President Nixon's proposals to rebuild the U.S. Merchant Marine so that it can more effectively compete with foreign ships for U.S. trade carriage, operating subsidy funds from the Federal Government were restricted to berth liner companies moving general cargo in common carriers.

Before, building subsidy was restricted to the berth line common carriers under operating contracts with the Maritime Administration of the Commerce Department.

The 1970 Act, termed the most significant U.S. maritime legislation in more than three decades, extends construction differential subsidies to bulk carriers, ships which carry ore, grain or oil, and which were not covered by the former subsidy program under the Act passed in 1936.

This bill has opened the way for the U.S. shipping industry to expand, and is making it possible to carry out the promise made by Mr. Nixon in 1968 to "adopt a policy that will enable American flagships to carry more American trade at competitive world prices" and to aid unsubsidized sectors of the merchant fleet "so they too can replace their deteriorating fleets."

A first for U.S.

This signing of the first contract involving tankers was important enough for the President to attend the signing of the NASSCO agreement. The contract is the second let to the shipyard within a year under the new changes written into the 1970 Act. Coupled with the first—a $60 million contract for two oil-bulk-ore carriers—it will keep the yard active through 1975 and add another 1,000 workers to the payroll.

This latest NASSCO contract involves a three-way agreement among the Maritime Administration, the shipbuilder, and the shipowner, the Margate Shipping Company of Delaware (an associate of the Keystone Shipping Company of Philadelphia). Margate, in turn, will lease the ships to Shell International Petroleum Company of London, who will use the steam oil tankers primarily to carry petroleum from the Carribbean to the U.S. Atlantic Coast.

The ships, costing $18 million each, will receive construction subsidies set by the new law at 43 percent. They are scheduled for delivery in 1974-75.

With this month's signing of the contract with NASSCO, the Maritime Administration has let nearly $200 million worth of contracts with West Coast shipbuilders in the last 18 months. These contracts will mean some 7,500 man-years of new shipyard employment. For every job created in a shipyard, it is estimated that one additional job will be created in secondary, supporting industries, as well.

With reference to the NASSCO contract, the Commerce Assistant Secretary said that Shell International, the charterer in this instance, could have obtained comparable tonnage anywhere, but "in this highly competitive market, an American owner was able to successfully compete" because of the new provisions under the 1970 Merchant Marine Act.

Speaking from a wooden platform to about 2,000 hard hat workers at the NASSCO yard, President Nixon emphasized that the United States is accelerating the program instituted to reconstruct its weakened merchant fleet.

As a result of the 1970 Act, the Maritime Administration reports that in fiscal year 1971:

- Contracts for shipbuilding totalled $391.7 million—the largest amount of construction undertaken in any one year.
- Subsidies totalled $169.2 million—also a record.
- The construction program for FY 1971 included the first two OBOs to be built in the United States, seven LASH vessels, three containerships, and 11 conversions.

Expectations for 1972 are high. Currently the Maritime Administration is reviewing applications or seriously discussing construction programs with operators involving more than 40 ships, with an estimated value that will exceed $1.8 billion. Many may well develop into actual contracts during the year.

Among the ships being considered are several LNG (liquefied natural gas) carriers, supertankers in excess of 200,000 tons, barge carrier containerships, OBOs, and tankers approximating 30,000-40,000 tons.

Gibson said that in terms of the expected increase in liquefied natural gas imports, it is estimated that as many as 80 LNG tankers of the 120,000 cubic meter size will be required to meet domestic demands for this clean burning fuel.

"And," he stressed, "we believe a substantial number of these ships will be built in this country and operated under the U.S. flag."

Present indications also point out that MarAd will approve construction subsidy applications for at least eight 225,000 deadweight ton tankers this year—forerunners of what promises to be a sizeable number of these very large crude carriers in the U.S. merchant fleet.

The projected increase in the U.S. bulk trade movement offers a major new market for American shipyards, now that bulk carriers are eligible for construction and operating subsidies.

Gibson thinks the potential is high. "By 1980," he claims, "we expect the bulk movement to exceed 650 million tons, reflecting a 56 percent increase in the dry bulk movement and an 83 percent increase in the liquid bulk tonnage. American shipyards and shipping companies will be able to capitalize on this marketing opportunity."

—Maritime Administration

Peacetime Expansion Target Of Phase II

Federal Director Says New Economic Program Keyed To More Jobs, More Output, Stable Prices

APPRECIATION EXPRESSED—*George Shultz, Director of office of Management and Budget (left), receives a certificate of appreciation from Vernon Louviere, president of the National Press Club. This photo was taken by U.S. News Service.*

A comprehensive blueprint is unfolding for restoring economic stability and removing price-wage controls as soon as conditions permit, George P. Shultz, Director of the Office of Management and Budget, told the National Press Club early this month.

The OMB Director explained in detail that the wage-price freeze, Phase II, and the remaining features of the Administration's package of economic actions and legislative proposals, are steps in the extended process of achieving this primary objective.

"There is a persistent and recurring rumor," he said, "that I am not in favor of economic controls. I'd like to take this opportunity, here and now, to confirm that rumor. I am not now, nor have I ever been, an advocate of a controlled economy.

"It was essential for the President to institute the wage-price freeze and follow-on program. It has been remarkably successful to date, but as soon as conditions permit, we must return to the free market.

"Now, it's time for some plain talk about what we want from Phase II and about what is needed to make Phase II work. We want peacetime expansion—more jobs at higher pay, more output at higher profits—and rea-

sonable price stability. And we have the ingredients needed to attain these objectives."

In explaining the Administration's basic goals, Shultz laid particular stress on constructive fiscal and monetary policy, and the importance of increases in labor productivity and of providing for pay increases within the bounds of productivity gains, as basic means of restoring a stable free market economy.

General approach

Commenting that Americans are fascinated by machinery, Shultz undertook to dispel the idea that the arrangements set up to restore economic stability constitute a machine.

"We have created a process, not a machine," he said, "to help restrain the rise in prices and costs. We think the method chosen is sound. The freeze worked: it stopped the rise in prices, it changed expectations about the prospects for reasonable price stability, and it gave time for developing the more flexible process now in place.

"The success of any process, however, depends heavily upon the people involved in supervising it. Fortunately, good people were willing to serve on both the Price Commission and the Pay Board, as well as the other boards, commissions, and committees. The initial problems they have faced have been tough and, as a group, they have worked at these problems in a public-spirited way.

"But the ultimate success of the new economic policy rests on more fundamental forces than the control apparatus which is getting all the attention. The nature of these forces, designed with a focus on the need for real growth, is suggested by recent actions taken by the Administration."

Shultz recalled that the 1971 Revenue Act, signed into law by President Nixon, provides for tax cuts of about $15 billion over the next three years to stimulate the economy and provide hundreds of thousands of jobs.

"A first step," he said, "toward a complete overhaul of the international monetary and trade framework was taken when the United States and other countries agreed to a new set of exchange rates which will help remedy the instability of international monetary arrangements, foster expanded international trade and strengthen our domestic employment."

Asked what he thought could be done to make George Meany, President of the AFL-CIO, a more receptive ally of the Administration's economic program, Shultz replied:

"I think the stance that the Administration should take and is taking toward all the important segments of the society is to advocate our programs, to try to work on a cooperative basis with people in labor as well as management, farmers, etc., and where we disagree we disagree, and where we agree we agree, and just call them as we see them.

"That is the process that I've personally followed with George Meany and it's the process that the President follows with him. It seems to me that is the right way to go about it. We're not trying to feud with anybody. We are just trying to get the job done, and take our positions as we see them, and those who disagree, I'm sure, will make that evident."

Shultz said that, in his judgment, three important preconditions had to be present to enable any system of controls to work in the United States. He outlined and explained these preconditions as follows:

- The "deck has to be stacked in your favor."

"Controls as an act of desperation in an economy which is rapidly getting out of hand," he said, "are likely to fail. But controls added to accelerate a process already under way have a good chance to succeed. Controls can be effective as a coup de grace, but not as a shot in the dark."

Necessary for success

Expanding upon this theme, he emphasized that controls were imposed to reinforce the decline in inflation and not to check it on the way up.

"The facts and figures cannot be argued with," he said. "From early 1967 to the peak around the beginning of 1970, the rate of increase in the CPI (cost-of-living index) accelerated from an annual rate of about 2 percent to a rate of more than 6 percent.

"In 1970, that acceleration stopped and the annual rate has declined unevenly but persistently back to a little over 4 percent from January to August, 1971, and to about 2 percent in recent months.

"Using other measures of inflation, the message is equally clear. In the last three months, the disturbing rise in the wholesale price index has been stopped dead. For the last four quarters, the rate of inflation as measured by the GNP (Gross National Product) deflator has fallen to where it is now lower than at any time since the first half of 1967.

SHULTZ TALKS ECONOMICS—*George P. Shultz, (left), Director of the Office of Management and Budget, addresses the National Press Club. Others are Michael Hudoba (center), Washington, D.C., correspondent for "Sports Afield," and Robert A. Podesta, Assistant Secretary of Commerce.*

"Perhaps of greatest underlying significance is the sharp fall in interest rates, reflecting sharply altered expectations about the future of inflation. The prime rate has now fallen to 5 percent, the lowest since early 1966, from a high of 8.5 percent two years ago.

Stopping inflation

"It was the progress in stopping the increasing rate of inflation which made it feasible as well as desirable for the President to act. The rate of inflation at midsummer was still too high, but progress was being made as the interplay of market forces gradually came to grips with rising prices. What remained was the need to rid the economy of the late 60s inflationary psychology."

- "You cannot let the relief of the symptoms of inflation blind you to the need for continued attention to the disease itself."

Shultz commented that the roots of the current inflation developed in the policies followed in the 1965-68 period. During that period, he said, both fiscal and monetary policies were excessively stimulative and led to a wartime prosperity that could not be sustained.

"The President," he added, "has repeatedly made the point that the causes of the inflation would be treated directly. The years 1969 through 1971 witnessed a sharp reversal in these inflationary policies. In his Aug. 15 address, he proposed tax cuts which were directed at stimulating output, productivity and employment.

"At the same time, he announced reductions in outlays to help maintain the prospect of fiscal balance without mitigating the stimulative effects of the proposed tax cuts. He moved to make fiscal policy more expansive, but showed that he was aware of the need to use fiscal policy sensibly and selectively."

- Controls to be successful should be initiated when the economy has entered a major expansion, but still has enough slack to permit strong productivity gains.

"We need expansion," he said, "for the sake of more and better jobs, and that very expansion will help reinforce reasonable price stability . . .

"During periods of real growth, total profits can continue to rise, even though profit margins are rising very slowly or held constant. During periods of productivity increase, not only wages but wage rates can rise commensurately without creating pressures for price increases. Controls should be flexible enough to permit advances in real growth and therefore in productivity to hold inflation down."

Shultz observed that the President long had been aware of the importance of improvement in productivity to the Nation's continued economic strength, that in mid-1970 he established the National Commission on Productivity to consider productivity problems and stimulate efforts to improve the productivity record, that Congress in 1971 expanded the work of the Commission, and that the 1973 fiscal budget makes provision for a still larger Commission program.

"But this all leads," he said, "to the central economic issue: is the economy expanding and will it rise strongly in the year ahead?

"While economic sentiment has improved, you can still find gloomy people around. In the face of the published figures, the pessimists really should take another look.

"Unemployment remained too high throughout 1971. Nevertheless, the rate of expansion of the economy was very impressive. Real GNP, bouncing back from a fourth quarter (1970) depressed by the auto strike, grew at a real 8 percent rate in the first quarter, and has continued to advance, though obviously at a slower pace, throughout the year. The expansion has not yet come up to our ambitious target set at the beginning of the year but it is clear enough that expansion is under way."

Shultz observed that, aside from the GNP statistics, homebuilding and car sales in

1971 were at all-time highs; civilian employment rose more than one million after July and in November exceeded 80 million for the first time; and retail sales are 10 percent above the same period last year.

"All this is evidence of expansion," he said, "and this expansion has taken place without the stimulus of business decisions to increase spending for inventories and new plant and equipment."

Continued improvement

He remarked that the latest figures show prospective increases in plant and equipment outlays, that sooner or later as sales rise and inventories decline the push will be on to rebuild inventories, and that changes in exchange rates and other favorable factors should stop the escape of expanded real demand into products produced abroad.

"As all this happens," he added, "and as we take up the remaining slack in the economy, productivity will continue to improve—as is already evident in the fact that productivity rates in 1971 have been above those in 1970 and 1969—and rising productivity will help make the controls look good."

In discussing the need for a constructive fiscal policy, Shultz said he was bound by emerging facts to add a note of caution, and that the budget was "just barely" under control, with the prospect of a small full employment deficit expected in the current fiscal year.

'Responsible budget'

He said President Nixon is sending to Congress a "responsible budget" for the coming 1973 fiscal year, "a budget that is expansive but which would come into balance if we were at full employment."

"It will take a fight to keep it there, I am sure," he predicted, "but it would be tragic to lose our sense of discipline just as the disciplined policies of recent years are paying off."

Asked what he meant by the statement that the budget was barely under control, he said:

"I mean that the rise in outlays now and prospectively is in a state where we can see our way clear to containing it within the revenues we would get when the economy gets to full employment, but just barely that . . . And we have a problem."

Asked what could be expected if developments did not confirm current expectations, he replied:

"The process of applying economic policy is one of studying continually what is going on, examining all the options about what could be done, and being ready to act on the basis of your information as it comes in. That seems to me to be the only logical thing to continue to do."

Asked how he reconciled his comments on pay raises with stopping inflation, he responded:

"I think we can expect, with productivity gains, to see wage rates continue their historical upward movement, but it is important for them to be related and contained within the overall productivity measurement if we are not to have . . . the arithmetic of inflation upon us."

Shultz pointed out that competition appears to be working in the steel industry, and news reports have related that prices are being quoted below ceiling price.

"Now that's the kind of situation it seems to me we look for," he said, "and when you see a situation where across the economy we have prices that are lower than the prices that are allowed by the control mechanism, then you say, well, the market is what's got its grip on the situation, and when we take away the controls nothing will happen."

'Uncertainty' and risk

Shultz commented that the vogue word of the present time is "uncertainty." "If you cannot find a good reason to buy, or to be confident," he said, "you blame it on a new magical cloud of uncertainty."

"I cannot accept," he added, "the rationale of those who demand the certainty of controls in a world where nothing is 100 percent certain except death, taxes, and Government spending."

He questioned whether many of those who insist upon certainty are not confusing "uncertainty" with risk. He remarked that in a wartime economy a minimum of risk is present, because war production demands are so pressing that inefficiency becomes more readily tolerable. In a peacetime economy, he said, greater risks have to be taken if profits are to be realized.

"The businessman," he added, "who now positions his company to take advantage of growing consumer confidence and spending will prove to be right. The businessman who is affected with indecision, or errs on the side of excessive caution, will see potential profits go to his competitors."

Poland Sees Trade Level With U.S. Doubling Soon, Agrees To Warsaw Office

Poles Tell American Delegation They Seek Wider Export Market In U.S., More Technology In Imports

Poland has agreed in principle to the opening in Warsaw of an American technical and trade information center that will provide Poles with increased access to information on U.S. products and technology and give visiting U.S. businessmen a one-stop marketing base in Poland.

Polish officials believe their country's two-way trade with the United States can be doubled in the next few years. They would welcome a greater emphasis both ways on industrial rather than agricultural shipments. They seek credit terms on their purchases from the United States. They want to expand their sales in areas outside the Atlantic Coast and Great Lakes States.

These points emerged in discussions in Warsaw Dec. 1-3 between an American delegation led by Secretary of Commerce Maurice H. Stans and Polish leaders, including Prime Minister Piotr Jaroszewicz, Minister of Foreign Affairs Stefan Jedrychowski, Minister of Foreign Trade Kazimierz Olszewski, Vice Chairman of the Council of Ministers and Chairman of the Planning Commission Mieczyslaw Jagielski, Secretary of the Party's Central Committee Jan Szydlak, and Ambassador-designate to the United States Witold Trampczynski.

The Secretary was accompanied by Harold B. Scott, Assistant Secretary of Commerce for Domestic and International Business, and a small group of trade specialists from the Bureau of International Commerce.

This is the last of three reports on a mission that took Secretary Stans and a group of Commerce Department officials to Sweden, the Soviet Union and Poland in November and December. The first, on the discussions in Sweden, appeared in the Dec. 27 issue; the second, on the talks in the Soviet Union, on Jan. 10.

TRADE DISCUSSION LEADERS—*Secretary Stans is greeted at Warsaw by his counterpart in the Polish Government, Minister of Foreign Trade Kazimierz Olszewski. At rear from left are Harold B. Scott, Assistant Secretary of Commerce for Domestic and International Business; Josef Winiewicz, Poland's Deputy Minister of Foreign Affairs and a former Ambassador to the U.S.; Witold Trampczynski, newly-named Polish Ambassador to the U.S., and Robert Smalley, Special Assistant to Secretary Stans.*

In addition to the Secretary's meetings, Assistant Secretary Scott and members of the delegation had a session at the Ministry of Foreign Trade with Vice Minister Ryszard Karski and Polish trade experts. This session dealt in detail with such subjects as U.S.-Polish trade prospects, Polish concern over U.S. protectionism, export control, joint ventures, and business representation in Poland for American firms.

On arrival in Warsaw, Secretary Stans made it clear that he had not come to negotiate but to discuss U.S.-Polish trade exchanges in general, particularly the possibilities of increasing trade and commercial relationships. Discussions at subsequent meetings dealt with trade prospects in the near future, possibilities of joint ventures, and aspects of trade facilitation.

The present level of total trade between the two countries is about $160 million. Poland wants to increase the percentage of manufactured articles in its exports, especially chemicals, furniture, pharmaceuticals, machinery, and consumer durables, working toward the goal of doubling the two-way trade. Poland also wants geographic diversification in its sales to the United States from the present pattern of 60 percent to the U.S. East Coast and 25 percent to the Great Lakes region.

At present 90 percent of Polish imports are agricultural goods but Poland would like to shift the emphasis to industrial processes. In this connection, the Poles presented to Secretary Stans a shopping list of items which add up to several hundreds of millions of dollars. They stated that they would be interested in buying these items from the United States if credit were available in conjunction with the purchases.

Polish officials stated that Poland is also interested in developing its raw materials base within a legal framework for joint-venture cooperation in manufacturing. There are several possible variants in the form of such ventures.

Secretary Stans indicated that American companies would be prepared to talk about joint-venture arrangements. It was suggested that negotiations of actual joint ventures would be a better way to establish norms than to try to do so in the abstract. It was suggested that Poland develop several specific prospects and the Department of Commerce would then try to interest American firms in these prospects.

Until 1957 U.S. trade with Poland was

U.S. Trade With Poland

Commodity	1967	1968	1969	1970	Jan.-Sept. 1971
Exports, total ($ million)	60.8	82.4	52.7	69.9	57.8
Soybeans and soy meal, cake, oil	12.0	15.9	16.6	19.7	14.8
Corn	10.7	16.0	7.9	5.4	12.3
Grains and preparations, other	10.9	4.1	1.2	.5	6.4
Cotton, raw	5.8	18.0	3.5	5.7	—
Tallow, inedible	2.1	2.4	.7	4.5	3.7
Cottonseed oil	—	—	—	4.6	2.7
Lard, margarine, shortening	.1	1.8	—	2.3	[1]
Cattle hides	1.7	1.6	2.5	1.3	2.8
Other agricultural products	5.2	11.9	4.8	6.4	6.1
Tungsten ores, concentrates	—	—	.8	4.5	—
Machinery	3.1	4.1	4.7	3.5	1.9
Ethylbenzene	—	—	—	2.4	.1
Other exports	9.2	6.6	10.0	9.1	7.0
Imports, total	91.0	96.9	97.8	97.9	87.5
Canned hams, other meat, and preparations	43.4	39.1	45.1	47.2	34.0
Fish, fish preparations	2.3	3.2	3.1	3.8	4.8
Fruits, vegetables	.7	1.7	1.5	1.9	.8
Fox and mink fur, undressed	2.5	3.8	3.0	1.4	1.5
Organic chemicals	1.6	1.4	1.3	1.2	1.0
Textile fabrics, woven	4.3	4.4	3.2	3.9	3.6
Glass, glassware	1.8	1.9	2.4	2.2	1.9
Iron and steel mill products	10.7	10.8	10.7	6.2	15.8
Aluminum, unwrought	.2	5.9	1.6	.7	.5
Zinc, unwrought	2.6	2.4	2.5	2.3	.8
Nails, screws, tacks of iron and steel	1.3	1.7	2.3	3.7	3.3
Furniture	1.3	1.7	1.9	2.3	2.2
Clothing, footwear	1.1	.6	1.1	2.2	2.5
Other imports	17.2	18.3	18.1	18.9	14.8

[1] Less than $50,000.
Source: Bureau of the Census.

rather small. Between 1957 and 1965 this trade grew substantially. Principal factors in this growth were: Public Law 480, Title I agreements, under which U.S. surplus agricultural commodities, valued in aggregate at $538.2 million, were sold for Polish zlotys on long-term, interest-free credit, with unused zlotys repayable in dollars; extension through the Export-Import Bank of dollar loans (three long-term loans, amounting to $61 million, at 4.5 percent interest); and restoration of Most-Favored-Nation treatment to imports from Poland, which became effective in December 1960.

During the five years of 1966-70 our imports from Poland averaged about $93 million per year and our exports to Poland averaged about $64 million, leaving a trade balance in Poland's favor of $29 million per year. Poland has used these earnings to pay its dollar obligations to the United States, as well as to finance its hard currency purchases elsewhere.

U.S. imports

Between 1966 and 1970 United States imports from Poland grew by 18 percent, from about $83 million to nearly $98 million, or at an average annual rate of about 3.3 percent.

Polish shipments to the United States were composed largely of canned hams and shoulders, averaging $30 million to $35 million worth per year.

Other significant items included preserved pork, frozen cod, fox fur, vegetable textile fiber fabrics, organic chemicals suitable for medicinal use, casein, iron and steel bars and rods, iron and steel plates and sheets, zinc, wire nails, screws, and similar articles or iron and steel, glassware, baskets and other plaited articles. A wide variety of machinery, equipment, tools, and other items accounted for the greater part of the remainder.

U.S. exports

Since 1957 U.S. exports to Poland have averaged about $83 million per year. Until 1965 these exports to Poland mainly included surplus agricultural commodities sold on liberal terms under PL-480 agreements and some industrial equipment made possible by loans through the Export-Import Bank.

PL-480 shipments have altered extensively the product mix of U.S. shipments to Poland. The Polish ability to satisfy most of its needs for agricultural commodities by purchases under PL-480 agreements freed some foreign exchange for cash purchases of additional agricultural products, machinery, and industrial raw materials in the United States. Until 1961, U.S. commercial exports to Poland were rather small. Since 1961 they have increased significantly and in 1964, the last year of PL-480 agreements, they amounted to about $60 million. In 1965 PL-480 shipments to Poland were halted and our exports to that country since then have been on a strictly commercial basis.

In 1965, the first year after the cessation of PL-480 shipments, U.S. exports to Poland amounted to only $35 million, a 75 percent decline from the preceding year's level. This was followed by substantial growth during the next three years. In 1968 exports to Poland exceeded $82 million. In 1969, however, they declined again and amounted to only $53 million, primarily as a result of Poland's smaller needs for grains from the United States. In 1970 exports to Poland rose to $70 million.

The bulk of exports to Poland throughout the postwar period consisted of corn, barley, rice, sorghum, wheat flour, nonfat dry milk, soybeans and soybean products, cattle hides, raw cotton, and tallow. In addition, the United States sold to Poland a variety of

industrial products and raw materials for industry in relatively small quantities. Most important among these were synthetic rubber, plasticizers, hormone products, and metalworking machinery.

Joint communique

A joint communique, issued at the conclusion of the visit to Warsaw, contains the following main points:

►There exist significant possibilities for the further development of economic and commercial relations between the United States of America and Poland so that in the course of several years the two-way trade volume could very substantially increase.

►It is especially desired to increase Polish exports of industrial products, in particular those of the chemical, pharmaceutical, furniture, machinery, and heavy industries, as well as American exports to Poland of machinery and equipment, industrial licenses and know-how. The Polish Government pointed out that its ability to increase its imports from the United States is largely dependent upon an increase in available credit facilities.

►Commercial and industrial cooperation will play an important role in the further development of trade and economic relations. It is, therefore, advisable to develop, on the basis of comprehensive negotiations between business firms of both countries, examples of practical arrangements for the formation and organization of joint enterprises which could be operational in manufacturing and raw materials industries.

►It will be useful to have periodic consultations on the governmental level, to stimulate trade missions, and to encourage broader business participation in fairs and exhibitions.

►In the light of the hoped-for increase of mutual commercial and economic relations, it is also desirable to increase the exchange of technical and commercial information. In this connection, the Polish side expressed agreement in principle to the opening in Warsaw of an American Technical Documentation and Trade Information Center.

Proposed Warsaw center

The purpose of the Technical Documentation and Trade Information Center in Warsaw will be to provide more extensive and varied services to both Polish and United States trade representatives, through a facility with a strictly commercial orientation. Although supervised and managed by the U.S. Embassy's Economic Section, this facility will be physically separate from the Embassy and will be staffed by several Polish nationals. It will be located in a business area of Warsaw and more readily accessible to interested Polish trade representatives, as well as United States businessmen visiting Warsaw.

This facility will constitute a repository of technical documentation and trade information, primarily from the United States, to be readily available to interested Poles. It will function as a one-stop service center and operating base for visiting United States businessmen, providing them with information on the Polish market and business contacts.

It will also serve to implement direct trade promotion activities, such as staging catalog shows, technical seminars, and single or limited product exhibitions. It will conduct market research and market promotion for trade fair participation. In addition, it will be responsible for local planning and follow-up on trade missions.

AT U.S. EXHIBITION IN POLAND—*Poland's two highest officials, Party First Secretary Edward Gierek and Prime Minister Piotr Jaroszewicz, visited the U.S. Exhibition at the Poznan International Trade Fair in June. Thomas H. Nisbet of the U.S. Exhibition staff (third from left), points out details to Jaroszewicz (center) and Gierek.*

DOMESTIC BUSINESS REPORT

- Conference exhibits gearing to future
- Job fairs opening way for veterans
- Impact program brings hope to jobless
- Eight (a) program means minority success
- Domestic shipping figures in maritime plan
- More than 25 million eligible for first vote

Conference Exhibits To Focus On Future

Twenty-five exhibits will add a futuristic setting to the Feb. 7-9 White House Conference on the Industrial World Ahead: 1990.

Exhibit preview

Some 1,500 of the Nation's leaders in business, labor, academics and government, who will be attending the meeting at the Sheraton-Park Hotel, will get the first view of the exhibits at a reception Sunday night, Feb. 6.

The displays, all industry wide in concept and geared to a future beyond the next two decades, were selected by an Exhibits Review Committee which used "very rigid criteria," to get the cream of American industry's creative talent into the historic conference, according to Mrs. LoRee P. Silloway, exhibits director for the White House Conference. The selection committee included representatives of the White House Conference staff, the Commerce and Labor departments.

Leading industries and trade associations built their entries on themes of the conference. "The Structure of the Private Enterprise System," "The Social Responsibility of Business," "Technology and Resources of Business," "The Human Side of Enterprise," and "An Exploration of the Future," are conference topics that will be explored in depth during the two-day session.

These far-reaching themes give exhibitors room for imaginative displays ranging from the roles of cotton and wood in the economy of the next generation to probing the depths of the ocean, to conversion from current domestic measures to the metric system.

By 1990, the American Society for Testing and Materials anticipates that all planning, production, training, purchasing and consumption will be in terms of liters, kilograms, meters and kilometers, rather than quarts, gallons and pounds. Its role in aiding the conversion will be an exhibit on the costs and impact of the conversion on various industries and what it means to the individual.

Cotton research

The National Cotton Council of America will illustrate the cotton industry's research in product and production improvement, ecology, and protein food. For instance, product improvement will show work on flammable fabrics, open-end weaving and knits. In the

areas of weed, insect and disease control the exhibit will show what is being done to develop integrated control systems employing biological, cultural, and chemical means.

Food from cotton

In food products, the Cotton Council exhibit will illustrate how cotton can be used to feed the masses in the years ahead through products now in the laboratory such as new uses for seed and seed products, breads made of high protein cottonseed flour, and drink products made from cottonseed oils.

Wood has unrivaled potential for the industrial world of 1990, according to the Forest Products Laboratory. Its exhibit will illustrate wood is renewable, reusable, biodegradable—one of the Nation's richest and most expandable resource.

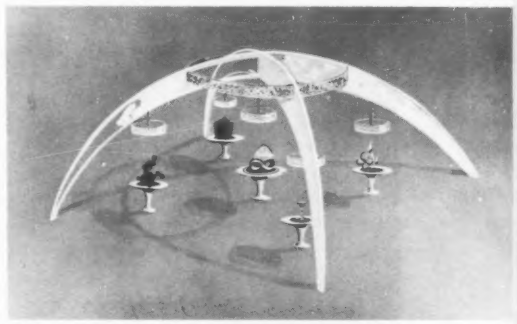
Japanese showing

After two days of exposure to the delegates invited to the conference the exhibits will be shipped to Japan for a show in March. The show in Japan is under auspices of the U.S. Information Agency.

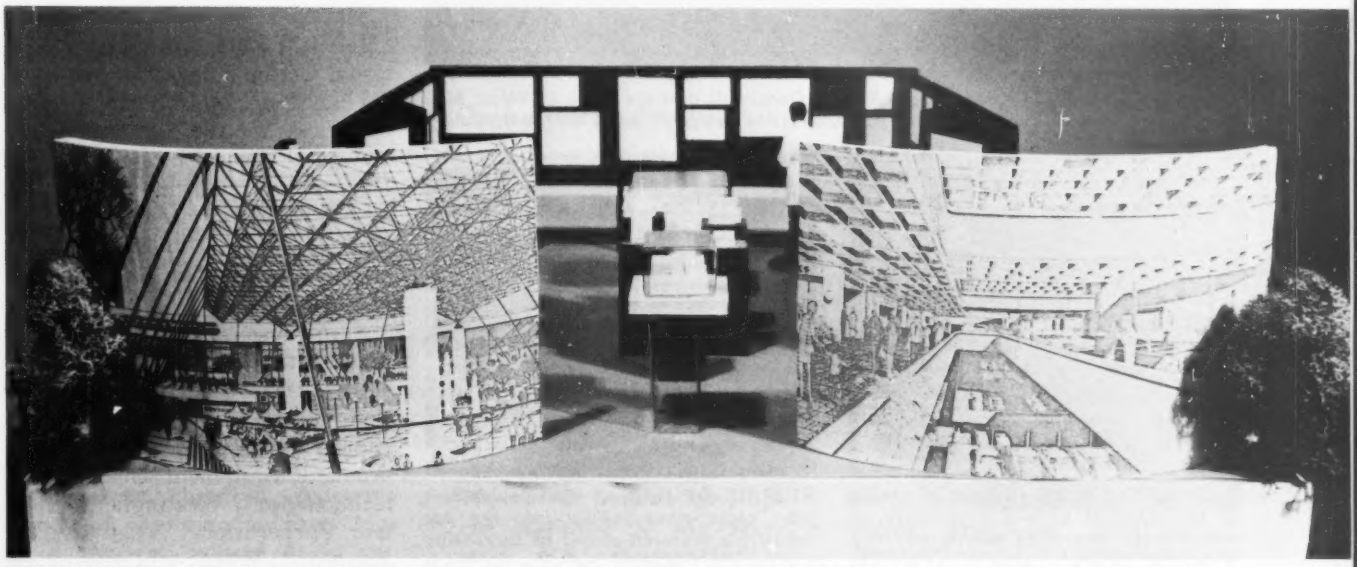
THE GOOD OF MANKIND—*A futuristic exhibit of the Westinghouse Electric Corp., emphasizes the human side of American free enterprise as seen in the future (1990).*

Exhibitors and their exhibit themes are:

Aluminum Company of America, "Alcoa Seaprobe," a visionary 243-foot all aluminum deep ocean search and recovery vessel designed to further the development of hydrospace; American Gas Association, "Coal Gassification Pilot Plant"; American Society of Mechanical Engineers, "Pollution-Free Industry World"; American Society for Testing and Materials, "Metric System of Measurement."

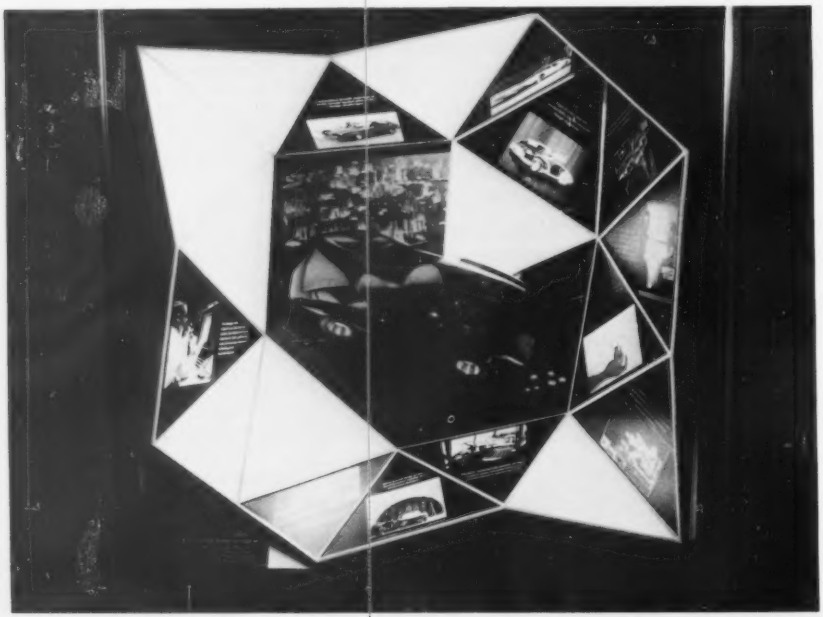


ANSWER TO ENERGY NEEDS—*Newport News Shipbuilding Company's exhibit "Marine Systems response to energy needs in the year 2000."*



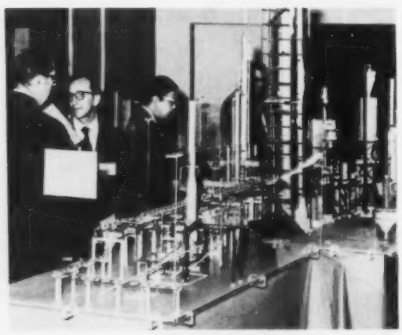
HOUSTON 2000—*"The Proposed Houston City," an exhibit of Brown and Root, Inc., deals with the Houston Center and is designed to allow traffic to move sequentially through the photograph and modular displays. It will come from Texas Eastern Transmission Corporation's exhibit room. The exhibit is one of 25 to be shown at the White House Conference.*

MOD KITCHEN—*Whirlpool's exhibit features the modular kitchen. At left is a special laundry sorting basket that automatically sorts the clothes and programs the washer. At right a touch of the button or foot lever raises or lowers the appliances so that the cook of tomorrow who wants to check on the pies could push a button which would raise the oven to eye level. Then that button returns it to oven level.*



CARS OF THE FUTURE—*General Motors Corp. will give its views of "How May The Vehicle Best Meet Man's Mobility Needs of The Future?" in a four-panel picture.*

ALCOA SEAPROBE—*Almost 75 percent of the planet is covered with water, an increasingly important source for food, water and minerals. Aluminum Company of America adds a new dimension to the field of oceanographic research and development with its unique SEAPROBE.*



FUTURE OF GAS—*A coal gasification pilot plant gives insight into the gas industry's research aimed at increasing the supply of natural gas. The exhibit is shown by the American Gas Association. All the exhibits will be previewed Feb. 6 at a White House Conference reception.*

Applied Information Industries, "Maritime Application of Space and Electronics Technology"; Bell Aerospace Co., "High Speed Surface Transportation"; Brown and Root, Inc., "The Proposed Houston City"; Bureau of the Census, "What The Public Market Will Be Like in 1990 As Pertains To Population."

Futuristic books

Conference Book Service, Inc., A collection of futuristically oriented books focused on the theme of the Conference; Forest Products Laboratories, "Wood as a resource for industry construction in the future extending renewable timber resources and improving the environment"; General Motors Corporation, "How May The Vehicle Best Meet Man's Mobility Needs of The Future?"

Hughes Aircraft Co., "Domestic Satellite"; Information Management International, "Management Communications Center"; J. J. Henry Co., Inc., "Liquefied Natural Gas Tanker"; Litton Industries, Inc., "Future Shipbuilding Terminals"; Maritime Administration, "Merchant Marine of the Future."

Metric information

National Bureau of Standards, "Metric Information Center"; National Cotton Council of America, "What the cotton industry has underway for the next 20 years"; Newport News Shipbuilding and Drydock Co., "Marine Systems response to energy needs in the year 2000"; Atlanta University Center Corp., "The Social Responsibility of Business."

Soros Associates, "Development of offshore terminals for bulk cargo ships"; Department of Transportation, "Marketing showcase for advanced transportation systems, products, equipment, concepts and technologies"; Westinghouse Electric Corporation, "The Good of Mankind"; Whirlpool Corporation, "Home Appliance Units."

—White House Conference

'Jobs For Vets' Proving Successful, More Business Slots Opening Daily

Jobs that many Vietnam-era veterans thought were unavailable are turning up at Jobs Fairs throughout the country.

As thousands of returning veterans stream into the civilian labor market monthly, the one day community Jobs Fair continues to increase in popularity and effectiveness, according to Charles Daly, Commerce representative on the National Jobs for Veterans Committee.

Pulling together

Jobs Fairs pull veterans and area employers together under one roof for a day of interviews and counselling. Booths around the fair hall, usually a community auditorium, also offer counselling services about skills and education opportunities.

"I toured the floor (of one job fair) and asked every businessman if he had a job available and the answer was always 'yes'," said William C. Woodward, president of the National Alliance of Businessmen. The Alliance, which has pledged to President Nixon to find 100,000 jobs for veterans by the end of this fiscal year, is the architect of the successful Jobs Fair. It recently published a handbook, "Anatomy of a Veterans Jobs Fair," detailing an Alliance experience in Kansas City, which netted 700 jobs for veterans in one day.

Veterans are qualified

Many employers have expressed surprise at the caliber of veterans who turn up at the fairs.

"There were quite a few with masters degrees, a lot with college courses under their belts," one businessman observed, following a day of interviewing at a Jobs Fair. And all seemed "very sincere."

Viewing the fairs through the veteran's eyes is another measure of the success. Many veterans call the fairs a chance to "get a foot in the door."

Meaning business

"When you meet a businessman face-to-face," a Kansas City veteran commented, "you can tell if he means business instead of having to send in a resume to the company and receiving a letter back saying we'll contact."

Successful job fairs are being sponsored throughout the country by organizations such as NAB, Chambers of Commerce, service groups and civil clubs.

The fairs are among a number of efforts in the nationwide jobs for veterans campaign.

Another effort expected to have significant impact on veteran unemployment is the mandatory requirement that government agencies and Federal contractors list job openings with the employment service. The employment service, under Federal law, must give veterans first preference in job referral and counseling.

—National Jobs For Veterans Committee

Ombudsman For Business

Businessmen who need assistance in their dealings with the Federal Government now have a central office in Washington, D.C., to write or call for information, suggestions, or even for registering complaints—the Commerce Department Ombudsman for Business.

All inquiries should be addressed to the Ombudsman, Thomas E. Drumm, Jr., Special Assistant to the Secretary, U.S. Department of Commerce, Washington, D.C. 20230, or call 202-967-3178.

NAVY VETERAN—*Timothy C. Fox worked in a soup factory in Omaha, Nebraska, before joining the drywall consortium where he is training as a taper. NAB programs help returning veterans take advantage of on-the-job training.*

FROM VIET-NAM HIGHLANDS—*Charles C. Lewis, 23, was drafted into the Army. He finds training for a "secure job and good career" a welcomed switch from operating a bulldozer under fire.*

TOWER AT ROSEBUD—*U.S. Sen. John Tower (center), shown with Councilman Andy Voltin (left), and Rosebud Mayor Clarence Wolf (far right), in Texas.*

Federal Agency Helping To Fight Jobless Rates In Depressed Areas

An extensive program is in progress to help relieve unemployment in individual spots throughout the Nation where the jobless rate is high, and to provide immediate jobs in the construction of needed projects in a wide range of communities.

Impact program

The program is being carried out by Commerce's Economic Development Administration dispensing a Public Works Impact Program of nearly $50 million to high unemployment areas in the U.S., its territories, and Puerto Rico.

The agency is working under authority of an amendment to the EDA Act passed by Congress and signed into law by President Nixon last Aug. 5. The amendment directs the allocation to special impact projects of up to 35 percent of $136 million which Congress thus far has appropriated to the EDA to be spent on public works under Title I of the Public Works and Economic Development Act.

EDA has been working with communities since last September to develop the special impact projects, which usually are smaller undertakings that communities already have developed, and that can be started as a rule in 60 days and completed in a year, turning them into quick job producers.

Generally, also, the projects are ones for which the communities affected can supply labor and materials, and, therefore, can draw upon local resources without bringing in skilled labor and materials in any large measure. EDA can provide up to 100 percent of the funding, although in most cases it supplies about 80 percent. The amount allocated by the agency usually is less than $600,000 per project.

Secretary of Commerce Maurice H. Stans was directed by President Nixon in early December to proceed with the program. By early January, EDA had approved $27,889,000 in grants for 126 projects in 44 States. It is anticipated that an additional $20 million in projects will be approved, and that the total will be in excess of 200.

The first project to get under way involved the construction of a water-transmission line in the little city of Rosebud, Tex. Groundbreaking ceremonies were held for this project on Jan. 6.

EDA approved a grant of $76,000 in mid-December for this project, which is expected to provide jobs for seven skilled and four unskilled workers from the Rosebud area for up to three months. The city of Rosebud, which applied for the funds, agreed to provide $19,000 to make up the total cost of the project, estimated at $95,000.

In announcing the grant for the Rosebud project, Robert A. Podesta, Assistant Secretary of Commerce for Economic Development, said: "EDA will continue to work with local officials in their programs to create new job opportunities."

Other scattered examples of special impact projects for which EDA has allocated funds follow:

- A grant of $231,000 in response to an application by the Inter-Tribal Indian Council, Inc., of Yankton, S. D., to be used to remodel a building to be converted to a community center. This project is expected to provide 47 jobs for persons from the area for up to nine months.
- A grant of $390,500 to help the city of Bayou La Batre, Ala., enlarge its water system and extend service to two low-income neighborhoods. EDA is meeting the full cost of this project, which is expected to provide jobs for 24 persons for up to nine months.
- A grant of $88,000 to help build a new grandstand for high school athletic events in Clinton, Ind. The South Vermillion Community School Corporation, applicant for the funds, will provide $22,000 to complete the $110,000 cost of the project, which is expected to provide 16 jobs for persons from the area for up to eight months.
- A grant of $400,000 to help Calhoun County, Fla., build a courthouse at Blountstown. The county has arranged to provide $1,003,200 to complete the $1,403,200 total cost of the project, which is expected to furnish jobs for 40 persons from the area.

• A grant of $480,000 to the city of Crescent City, Calif., to help construct a cultural and convention center. The city has arranged to advance $120,000 to complete the $600,000 cost of the project, which will provide an estimated 61 jobs for persons for up to nine months.

• A grant of $420,000 to the city of Frenchburg, Ky., for installation of a sewer system. The city will put up $80,000 to complete the $500,000 cost of the project, which is expected to provide 30 jobs for people from the area for up to nine months.

• A grant of $253,600 to Wetzel County, W. Va., to aid in the construction of a bridge at New Martineville. The county will contribute $63,400 toward the $317,000 total cost of the project, which is expected to furnish jobs for 35 persons from the area for up to nine months.

• A grant of $56,000 to the city of Teague, Tex., to help pave city streets. The city will advance $14,000 to complete the $70,000 cost of the project, which is expected to provide jobs for two skilled and six unskilled workers for up to six months.

• A grant of $375,000 to Seattle, Wash., to help build an olympic-size swimming pool with floating bulkhead. The city will put up $375,000 toward the $750,000 cost of the project, which is expected to provide jobs for 43 skilled and nine unskilled workers for up to 11 months.

• A grant of $585,600 to the city of Franklin, New Hampshire, to expand the community's water system. The city will contribute $146,400 to complete the $732,000 cost of the project, which will furnish an estimated 34 jobs for persons from the area for up to 11 months.

EDA is expected to continue making awards for similar projects for the next several weeks, and construction should be under way on the entire program in the early spring months. *—EDA*

Six Changes Giving Big Boost To National Program On MESBICs

Six changes, designed to encourage greater participation in the Minority Enterprise Small Business Investment Company (MESBIC) program, have been adopted by the Small Business Administration as modifications to the Small Business Investment Company regulations.

MESBIC purpose

Established through a cooperative program of the Commerce Department's Office of Minority Business Enterprise and SBA, MESBICs are SBA-licensed private investment companies whose sole purpose is to provide business opportunities, long-term financing and management assistance to minority businesses. The comprehensive program utilizes the unique skills and resources of American corporations, associations, and other groups seeking to help minority enterprise expand. MESBICs are funded and operated privately by these organizations across the country.

The MESBIC program is a special application of the SBIC concept designed specifically to develop more minority-controlled businesses throughout the country.

The SBIC regulations have been modified to:

►Exempt MESBICs from existing diversification requirements. MESBICs are now permitted to concentrate their investments in a given industrial or business field which SBA officials said should encourage formation of MESBICs by specialists with heavy experience and ability in a specific area of activity.

►Permit MESBICs to invest up to 30 percent of their private capital in a single business rather than 20 percent, the previous limit. This will decrease the total number of investments, and allow greater attention and a more highly focused management assistance program for the disadvantaged firms.

►Exempt MESBICs from the requirement of unimpaired private capital, but provide for a security interest to SBA if a deficit equivalent to 50 percent of private capital is reached. This modification should permit new MESBICs to become established, early losses notwithstanding.

►Permit MESBICs to guarantee loans to their portfolio concerns from all lenders, not only institutional lenders as under the former restriction. The SBA said this amendment will facilitate loans from foundations, church groups, business and public-interest groups and increase the effectiveness and scope of MESBIC operations.

►Reduce the minimum investment period for both SBICs and MESBICs from five years down to 30 months, for investments in disadvantaged small concerns, since it will reduce the duration of an SBICs or a MESBICs exposure to risk. Also, by increasing the portfolio turnover, the modification will permit a larger number of financings within the same time span.

►Change the limitation on small concern's use of MESBIC funds for purchase of goods and services from affiliated suppliers from less than 50 percent of the funds to less than 75 percent. According to the SBA, this amendment will encourage the formation of MESBICs by franchisors and manufacturers interested in distribution through minority enterprise concerns.

The modifications arose out of the SBA conclusion that several regulations, which are necessary and valid for regular SBICs had an inordinately negative impact on MESBICs because of the nature of MESBIC investments.

—Small Business Administration

Success Stories By Minority Firms Result Of Federal Buying Program

The Nixon Administration's push to make $120 million in government procurement opportunities available to minority-owned businesses during this fiscal year is producing an inflow of success stories from minority businessmen throughout the Nation.

Emeal Wilson's A-1 Janitorial Service of Baltimore, is one. It was a long climb from Wilson's initial $6 contract to wax the floors of a six-room house to the $158,512 contract his firm was awarded six months ago.

Through the Small Business Administration's 8(a) procurement contracting activities Wilson received the contract to provide the General Services Administration cleaning and maintenance services for a Federal building at 101 Indiana Ave. Success, six months later climaxes an 18 year period of growing pains since Wilson made an initial investment of 69 cents for a can of paste wax.

Willis J. Wood, buildings manager of the General Accounting Office field office, commended Wilson's work.

"No other contractor in the experience of this office has ever approached the thoroughness of his work" Wood continued, "This is really remarkable considering that he received the contract under Section 8(a) of the program to assist minority businesses and had never before worked on a job of this magnitude.

A-1 Janitorial employs 42 full time workers who are described by Wilson as "experts in the cleaning business." New employees are personally trained by Wilson "to learn how to do an A-1 job from the ground up so that those who qualify can move into supervisory positions at the earliest opportunity."

VIEW OF SUCCESS—*A worker for Emeal Wilson's A-1 Janitorial Service of Baltimore, cleans the windows of a federal building in view of the Capitol dome. The federal contract of $158,512 for cleaning and maintenance service was awarded under Section 8(a) procurement provisions of the Small Business Act. The section is being used in an all out effort to promote and to expand minority enterprise.*

Across the country

In another part of the country, Golden Oak, Inc. of Los Angeles received the third largest contract ever awarded by the General Services Administration under the Section 8(a) program—another example of the success of the Federal buying plan to benefit minority enterprise.

Robert L. Kunzig, administrator of GSA, said that Golden Oak, which has manufacturered everything from baseball bats to pool tables, will produce 3,441 office desks and 962 desk attachment units for GSA stock under the $639,491 contract.

Section 8(a) in the Small Business Investment Act of 1952 authorizes the Small Business Administration to act as a prime contract for other Federal agencies for certain of their needs for the purchase of goods and services.

Having been identified as an important tool which could open Federal marketing opportunities to minority-owned firms, this section of the 1952 Act has resulted in a total of almost $100 million of Federal purchases of goods and services during the past two years. In fact, direct minority procurement has risen from $3.8 million in fiscal 1969 to $75 million in fiscal 1971.

Eight (a), said an Office of Minority Business Enterprise official, is resulting in continued expansion and in successes for minorities entering the U.S. business world. —*OMBE*

Government Helping Hand Will Be Extended To U.S. Domestic Shipping

"The Maritime Administration is going to play an active role in promoting the welfare and well being of all elements of the American domestic shipping industry."

Andrew Gibson, Assistant Secretary of Commerce for Maritime Affairs, made the new commitment and Robert J. Blackwell, Maritime's Deputy Assistant Secretary, reaffirmed it in a report on the new Office of Domestic Shipping.

MarAd's 'ombudsman'

The new office, headed by Burt Kyle, is functioning as an "ombudsman" for the domestic shipping industry within the government including Congress, and a partner in research and development. Its divisions—one for Great Lakes shipping, one for domestic ocean shipping and another for inland waterways—are charged with promoting all industry segments.

New possibilities for Maritime assistance to the domestic shipping industry were opened by the Merchant Maritime Act of 1970. Further impetus grew from the recognition of the transportation crisis facing the Nation.

"Demands on our domestic transportation system, already at the brink of overload, are expected to increase by some 50 percent in this decade," Blackwell told a meeting of the American Waterways Operators, Inc., in New Orleans recently.

"We believe that our domestic shipping industry, particularly the inland waterways and coastal segments, are in a good position to capitalize on this growth," Blackwell asserted. The position is strengthened by the highly developed nature of the waterways network and the low cost of barge transportation.

Blackwell pledged that Maritime intends to insure that domestic shipping industry expands in coming years as part of a balanced national surface transportation network. He expressed full awareness of the domestic industry's "potential to serve U.S. commerce efficiently and economically."

He said the development of containerization in the coastal and offshore trades and the advent of barge carrying ships have directed attention to domestic shippers to "assure the swift and efficient intermodal movement of trade."

Expressing assurance that Maritime recognizes the vast unfavorable impact of one piece of pending pollution legislation, he noted it could "severely hamper the waterborne movement of commodities such as ammonia, chlorine and caustic soda solutions."

"We must ask ourselves the question," Blackwell asserted, "Is the risk of pollution from these chemicals carried in barges so great that ending it is worth the economic damage inflicted?"

"We are convinced that improvements in pollution control technology will allow us to eliminate the danger of pollution without creating undue economic hardships on the water transport industry, the people it employs and the people it serves," he concluded.

Blackwell explained Maritime's research in the area of environmental protection. Studies involve developing and testing shipboard oil-water separation systems and alternative shoreside waste-disposal collection facilities. Also, on the development of collision avoidance systems will do much to reduce the danger of catastrophic oil spills.

The new Maritime office is compiling and evaluating statistics on commodity flows, traffic patterns and transport capabilities, to aid domestic shippers in pinpointing new markets and balancing out existing trades.

"We are working to create a computerized data bank that will include information on competitive land movements, as well as water commerce," the Maritime official continued, "We are continuing to work with industry representatives to insure that this system will be useful to all and compatible with existing data systems."

Robert J. Blackwell
Deputy Assistant Secretary
For Maritime Affairs

Direct assistance

Blackwell noted that Maritime can directly assist domestic shippers in the area of finance. For example, he noted further, that the ceiling on the amount of insurance Maritime is empowered to place on commercially placed loans and mortgages on new and converted vessels, including tugs and barges, has been tripled. The ceiling is now $3 billion.

A number of programs are designed to aid operators find the capital necessary for construction.

Research and development, an area of Maritime which has increased three-fold in the past several years, also has potential for use by domestic shippers.

On a broader scale, Maritime is preparing to initiate an analysis of the domestic shipping market. This study will investigate the market environment in which the waterways industry will compete. It will also include forecasts of trade flows, analysis of future markets, identification of legal and regulatory constraints, and a financial analysis, which will include a look at the impact of Federal assistance programs on the industry.

—Maritime Administration

Shoe-Slipper Sales Start Uphill Climb

Apparent consumption of shoes and slippers in 1970 totaled 845.1 million pairs valued at $3.5 billion as compared with 818.7 million pairs valued at $2.7 billion in 1969, according to a report prepared by Commerce's Bureau of the Census.

Production dropped

However, production of shoes and slippers in 1970 totaled 562.3 million pairs, a drop of nearly three percent from the 1969 production of 577 million pairs.

Production of men's shoes in 1970 totaled 119.7 million pairs, a gain of about two percent over 1969. However, output in the other categories showed declines, as follows: misses' shoes, 23.2 million pairs, a drop of 17 percent; children's shoes, 25.9 million pairs, down nine percent; and women's shoes, 230.2 million pairs, a decrease of about three percent.

Slipper production in 1970 totaled 96.2 million pairs, down about five percent. Production of other footwear, except sole vulcanized or molded to fabric upper, rose to 5.4 million pairs, up 24 percent.

Factory shipments in 1970 totaled 569 million pairs valued at $2,942.7 million, an average of $5.17 per pair. This compared with 584.2 million pairs in 1969 valued at $2,888.3 million, or $4.94 per pair.

Exports of shoes and slippers in 1970 totaled 2.2 million pairs valued at $9 million, a decrease of slightly more than four percent from exports of 2.3 million pairs in 1969 valued at $8 million.

Imports of shoes and slippers in 1970 totaled 284.9 million pairs valued at $593 million as compared with 244 million pairs in 1969 valued at $461 million. The 1970 imports represented an increase over 1969 of about 17 percent in quantity and 29 percent in value.

—Census Bureau

Metropolitan Area Statistics

Land areas of U.S. metropolitan areas of 200,000 or more persons range from 47 square miles for the Jersey City, N.J., area to 27,295 square miles for the San Bernardino-Riverside-Ontario, Calif., area.

Change in the white population outside central cities of U.S. metropolitan areas of 200,000 or more persons from 1960 to 1970 range from a 20 percent decrease in the Corpus Christi, Tex., area to a 133 percent increase in the Anaheim-Santa Ana-Garden Grove, Calif., area.

Median age of the population in central cities of U.S. metropolitan areas of 200,000 or more persons in 1970 ranged from a high of 39.3 years in the West Palm Beach, Fla., area to a low of 23.2 years in the Ann Arbor, Mich., Columbia, S.C., and El Paso, Tex., areas.

Among U.S. metropolitan areas with 200,000 or more population in 1970, weekly salary paid to manufacturing production workers in 1970 averaged highest in the Flint, Mich., area, $188; lowest in the El Paso, Tex., area, $87.

Among U.S. metropolitan areas with 200,000 or more population in 1970, average public assistance monthly payments to families with dependent children in February 1971 ranged from $48 in the Jackson, Miss., area to $308 in the Rochester, N.Y., area.

Among U.S. metropolitan areas with 200,000 or more population in 1970, the crime rate for automobile theft in 1970 ranged from 75 per 100,000 population in the Johnstown, Pa., area to 1,351 in the Gary-Hammond-East Chicago, Ind., area.

The above statistics were taken from the fifth annual reprint of the Metropolitan Area Statistics *booklet, published by the Commerce Department's Census Bureau. This reprint is the first such booklet containing 1970 census data, including 218 items of information about the 148 Standard Metropolitan Statistical Areas in the country which had 200,000 or more inhabitants in 1970. The booklet is available for 35 cents each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from Commerce Department field offices in major U.S. cities.*

Industrial Gases Now Growing In Demand

Industrial gas shipments are showing definite market gains.

The value of shipments of industrial gases by primary manufacturers in 1970 totaled $633 million, or about two percent more than the 1969 figure of $623 million, according to Commerce's Bureau of the Census.

A report prepared by the Bureau showed that the 1970 total was composed of $99 million of acetylene, $37 million of carbon dioxide, and $498 million of a product grouping composed of elemental gases and other industrial gases.

Compared with 1969, the 1970 value totals showed a slight increase for acetylene, a drop of 11 percent for carbon dioxide, and a gain of 3 percent of other elemental gases.

The figures do not include values for hydrocarbon gases and for sulfur dioxide and chlorine.

—Census Bureau

Business-Consumer Gap Being Closed By Federal Council Studies In 1972

The National Business Council for Consumer Affairs will delve into virtually every area of consumer interest this year, its executive director has reported.

William D. Lee, Deputy Assistant Secretary of Commerce and Executive Director of the Council, disclosed the 116-member council's 1972 work agenda which ranges from a comprehensive look at consumer credit in the United States to projects which would encourage warranty simplification.

Important forum

The Council, perhaps the most important forum where the business community can work with government on consumer problems, was created by Executive Order of the President last August. It operates through subcouncils.

Lee reports that the members are actively participating on a personal basis in the working assignments selected by each subcouncil.

The Council projects through 1972 will include a report on the voluntary action letter sent to major national advertisers, and a wide variety of other efforts in such areas as warranties, simplification, and guidelines on complaint handling, advertising substantiation, packaging and labeling.

The latter project includes coverage of open dating, nutrition labeling, grade labeling, care labeling, ingredient disclosure, safety warning and other selected issues.

The U.S. system for the establishment of product safety standards with emphasis on the private sector role, is another topic.

Another subcouncil is looking at consumer credit, including the role of credit in the economy, the availability of credit, billing practices and creditor remedies.

A study of the role of advertising in the economy and a more specific study on children and television advertising are on the Council agenda for later in the year, as is an examination of advertising as it relates to other special audiences.

The projects will focus on product safety data systems, federal, corporate and industry wide levels. And, in the area of complaints and remedies, return and money back policies and mediation and arbitration are being studied.

Lee said that business is concerned, and wants to work closely with the consumer.

The only way it can constructively combat the consumerism trend that has grown in this country is to take the initiative, he feels.

"Through the Council, by studying all areas which touch the consumer we hope to come up with some projects which are clearly in his interest," he added.

The Council Executive Director believes that the results of the studies about to be carried out by the subcouncils will help show the way to support this relationship.

In addition, Lee said that business in the United States has achieved the highest quality goods at the least possible cost on the face of the earth, and done it through an honest, responsible business community which gives value received. This, he said, needs to be told to the American public, comparing the U.S. standard of living with the rest of the world.

—National Council For Consumer Affairs

LOOKING THEM OVER—*A fashion conscious consumer ponders a decision at a display of shoes and bags. In 1972 consumers will find the selection broader and business more consumer conscious.*

HOT CONSUMER ITEM—*Televisions are among the hot consumer items. High volume sales and customer self service permit certain types of retail establishments, such as the New York City appliance store shown here, to offer goods at low prices.*

Estimates Of The Population Of Voting Age, By Age And Region, For November 1972

(Numbers In Thousands. Resident Population)

Region, Division, And State	Total, 18 Years Old And Over	18 To 24 Years Old		
		Total	18 To 20 Years Old	21 To 24 Years Old
United States	139,642	25,675	11,462	14,213
Regions:				
Northeast	34,189	5,736	2,540	3,195
North Central	38,200	6,944	3,161	3,783
South	43,073	8,307	3,734	4,572
West	24,181	4,689	2,027	2,662

(Note: Numbers do not total correctly, due to rounding of numbers.)

Potential Electorate Will Include 25 Million New Voters

In the Presidential and Congressional elections of November, 1972, about 25 million young persons 18 to 24, or 18 percent of the potential electorate, will be eligible to vote for the first time. About 11 million of these young people will be 18 to 20 years old and eligible to vote under the Voting Rights Act Amendment of 1970, which lowered the voting age in national elections to 18 in all States after January 1, 1971. About 14 million will be 21 to 24 years old.

Two states lead

California and New York are expected to have the greatest number of potential new voters in 1972 —more than two million each. Texas, Pennsylvania, Ohio, Illinois, and Michigan each will have more than one million potential new voters.

This information is embodied in a report entitled "Characteristics of New Voters: 1972," compiled by Commerce's Bureau of the Census. Another report prepared by the Bureau shows that in 1970 more than 133 million persons, or nearly two-thirds of the total population, were of voting age, including 18 to 20 year-olds.

The typical potential voter in the 18-to-24 group this year will be white, single, living in a family, a high school graduate but not going to school, holding a job, and living in a metropolitan area.

Of the entire group, 87 percent are white, 12 percent Negro, and one percent members of other races. Women comprise 50.5 percent of the group.

Most of them are single. In March, 1971, 92 percent of the men 18 and 19 were unmarried as were 77 percent of the women. In the 20-to-24 age group, 56 percent of the men and 37 percent of the women were single.

At the same time, a large majority of the 18-to-24 age group are family members. For men, 61 percent live with their parents or other relatives, and 29 percent head their own families. Among women, 42 percent are wives of family heads and 45 percent live with their parents or other relatives.

As for educational attainment, 70 percent of the 18-to-24 year olds are not enrolled in school, including 53 percent who have high school diplomas and 17 percent who have not finished high school. Of the 30 percent enrolled in school, 26 percent attend college.

The 18-to-24 year old is likely to be in the labor force. Most recent figures show that 63 percent of the men were in the labor force and not in school, and four percent were neither in the labor force nor in school. Among women, 47 percent were in the labor force and not in school, and 30 percent, primarily housewives, were not in the labor force or attending school.

Of the 18-to-24 group, 66 percent live in metropolitan areas, 30 percent in central cities, about 35 percent in suburbs, and a similar proportion in nonmetropolitan areas. The group, however, is highly mobile. Between March, 1969, and March, 1970, 36 percent had changed addresses, including 14 percent who migrated to another country and seven percent to another State.

How many voters?

How many of the new voters will participate in the 1972 elections is not known. In the 1968 Presidential election, only 33 percent of the 18-to-20 group who lived in the States where they were eligible to vote said they voted. In all States, 51 percent of the 21-to-24 year olds said they voted, compared to 70 percent of those 25 and older. Census Bureau demographers estimate that even with the large number of new young voters the median age of the electorate in November, 1972, will be 43 years.

(Copies of the report, Characteristics of New Voters: 1972, Series P-20, No. 230, are available for 35 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from Commerce Department field offices in major cities.)

—Bureau of the Census

Marketing Plans Can Now Include A Look At U.S. Population Summary

Ten in every 100 Americans lived in California in 1970 and another nine in New York state.

And, with 6,683 persons per square mile, the New York City-Northeastern New Jersey Urbanized Area was the most densely populated in the country. The nearby Vineland-Millville, N.J. area, with 863 persons per square mile, was the least densely populated urbanized area.

The United States population grew by more than two million last year, surpassing a bulging 208 million total at the start of the new year, according to the Census Bureau.

At midnight, Jan. 1, 1972, the population, estimated by Census officials, was 208,557,735. The estimate is consistent with the 1970 count. The net gain during 1971 was the result of approximately 3,591,000 births, 1,927,000 deaths and 376,000 added by net immigration.

The greatest net annual increase ever recorded was 3,058,000 in 1956. The rate of gain during 1971 was just under one percent, slightly lower than the rate during 1970. Annual rate of gain from 1947 through 1961 was 1.6 to 1.8 percent.

These random facts are taken from a new Census Bureau report summarizing returns from the 1970 Census of Population.

The summary, which consolidates the statistics on the number of inhabitants in the United States, will not only be invaluable to the Federal Government, but it is expected business and industry will find it an important tool in developing their marketing plans for the coming year and the future.

Twenty-six maps, many in color, illustrate the summary on the Nation's inhabitants. The 250-page document has 16 charts and 46 tables showing population for the country as a whole, its urban and rural parts, regions, divisions and states. The charts and tables also illustrate data for counties, incorporated and unincorporated places and for certain other areas such as congressional districts, standard metropolitan statistical areas and state economic areas.

Selected information is shown for Puerto Rico and areas of U.S. sovereignty or jurisdiction.

Copies of the report, "Number Of Inhabitants, U.S. Summary, 1970 Census Of Population," PC (1)-A1, are available for $2 each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, or from Commerce field offices in major cities.

—Census Bureau

Federal Loan Rates Lowering This Year

Interest rates on Federal loans to stimulate economic growth will be reduced .125 percent for the first quarter of 1972, Secretary Stans announced.

The rate reduction, based on the costs of borrowing to the Federal government, applies to loans made by the Economic Development Administration, the Commerce agency established to encourage industrial commercial growth in economically lagging areas.

For the first quarter of 1972 the EDA public works loans rate will be 5.25 percent, reduced from 5.375 percent, the rate for October-December, 1971. Business loans in this quarter will be made by EDA at a rate of 5.75 percent, down from 5.875 percent for the previous quarter. *—EDA*

Business Calendar

Jan. 25—Point Clear, Ala.—Secretary Stans will speak at Lake Carriers Association and Dominion Marine Association meeting.

Jan. 27-28 — Boston — Regional Growth Conference, sponsored by Department of Housing and Urban Development. For information, Richard Doherty, director, Metropolitan Area Planning Council. Phone: 617-523-2454.

Jan. 27-29—Baltimore—Economic Development Conference, sponsored by Congressional Black Caucus, Morgan State College, Baltimore, Md. For information, contact Black Caucus. Phone: 202-546-3425.

Feb. 2 — New York — Secretary Stans will speak at National Maritime Council Unity Dinner at Hotel Plaza.

Feb. 3-4 — Seattle — Regional Growth Conference, sponsored by Department of Housing and Urban Development. For information, Mart Kask, director, Puget Sound Governmental Conference. Phone: 206-464-7090.

Feb. 4-5 — San Diego — Regional Growth Conference, sponsored by HUD. For information, Richard Huff, director, San Diego County Comprehensive Planning Organization. Phone: 714-239-7711. Ext. 717.

Feb. 11—Durham, N.C.—Durham Business & Professional Chain Annual Banquet, North Carolina Central University, Durham, N.C. For information, contact Ralph A. Hunt. Phone: 919-688-7356.

Feb. 13-16—Washington — Eighth Annual Opportunities Industrialization Center Convention, sponsored by OIC of America, Sheraton Park Hotel, Washington, D.C. For information contact OIC. Phone: 215-CE6-5400.

SCIENCE & TECHNOLOGY REPORT

- Cannikin provides vital earthquake data
- Robert Gottschalk is new Patents Commissioner
- Building engineers' report calls for updating design code
- Tuna net technique cuts porpoise deaths
- California firm wins bid
- Patents of special interest

Cannikin Provides Vital Earthquake Data

First report of the results of the Cannikin nuclear detonation beneath the Aleutian island of Amchitka November 6 indicates that the controversial underground blast had no effect on earthquake activity either locally or elsewhere on the planet.

From seismic data obtained by instruments crowded around the Amchitka test site, and by instruments around the world, altogether the most precise seismic data ever recorded for a tremor, natural or manmade, scientists have begun assembling a portrait of the seismic nature of the Cannikin event.

According to the National Earthquake Information Center of Commerce's National Oceanic and Atmospheric Administration, the week preceding and the two weeks following Cannikin were unusually quiet, seismically speaking. No earthquakes of the 6½ magnitude class as measured on the Richter scale were recorded anywhere in the world. Magnitudes of that class and higher trigger an alarm at the earthquake center.

The first natural earthquake to be located followed the Cannikin detonation by more than four hours. It was centered more than 5,400 miles from Amchitka in the Sawu Sea region of Indonesia near the island of Timor. A slightly larger shock of magnitude 5.3 occurred 16 hours after Cannikin in the central Pacific about 1,700 miles west of Ecuador. Other smaller shocks over the next 24 hours were located in Guatemala, northern Japan, off the Oregon coast, the Leeward Islands in the Caribbean, the New Hebrides Islands in the South Pacific, and the North Atlantic Ocean.

SEISMOGRAPHIC CHECK — *Seismographs on Amchitka and nearby islands produced extremely clear records of Cannikin's aftershock activity. It provided a source of information unsurpassed.*

Post-Cannikin tremors are part of the normal global seismic energy release and are not related to the test. Since approximately 5,000 epicenters are located annually, more than 13 earthquakes are located daily, on the average. Annually an average of 140 magnitude 6 and larger earthquakes occurs.

In order for the NEIC to locate an epicenter, the seismic waves from the earthquake must be reported by five or more observatories. The Center received reports from more than 300 observatories recording the Cannikin event.

During the remainder of November, there were few large earthquakes. The first earthquake with magnitude larger than 6 occurred on November 20 in the Fiji Islands. On November 21, a major shock of magnitude approximately 7 occurred harmlessly in the Santa Cruz Islands in the South Pacific and, on November 24, a shock occurred off the east coast of Kamchatka with an approximate magnitude of 7.3. Kamchatka is the large Siberian peninsula at the west end of the Aleutian Island chain. No reports of damage have been received from any of these shocks, although the latter undoubtedly was strongly felt on Kamchatka.

As far as seismic sea wave or tsunami activity is concerned, none was observed on tide gages following the detonation. The tsunami wave train set in motion by some large earthquakes is readily discernible as a set of wave motions that have longer periods than wind waves, but shorter periods than the ocean tides. This unique tsunami "fingerprint" is used to confirm the existence of a potentially hazardous wave after a major ocean-area earthquake has occurred.

Underground nuclear tests such as Cannikin have provided earth scientists with a unique opportunity to study seismic events of known yield, origin, and time of occurrence, and have done much to advance the states of the various seismological arts.

Cannikin provided a source of energy and information that is unsurpassed. As one NOAA seismologist put it, "Everybody who had an instrument had it running for this one."

Scientists in the U.S. and in other nations used the seismic waves emanating from Amchitka as a "window" to the earth's interior. How well the experiment illuminated this hidden region will not be known for some time; but these probable results can be seen:

- Seismic and other geophysical data from Cannikin will do much to characterize one segment of the Aleutian Island arc in substantial detail, and provide important clues to the structure and behavior of similar geologic features elsewhere.

Extremely clear records

- The clustered seismographs on Amchitka and nearby islands produced extremely clear records of Cannikin's aftershock activity. The test also provided a record of an entire aftershock sequence, permitting scientists to view the beginning, middle, and end of the series over a comparatively short period. NOAA seismologists expect to extract significant new information on the causal mechanisms of aftershocks, and hope to be able to apply that knowledge to an improved understanding of natural earthquake source mechanisms. Because this work might apply to natural earthquakes, it holds particular promise for scientists studying earthquake prediction and mitigation techniques.
- Instruments set up at various distances from Cannikin's ground zero measured the dynamic response of the earth's surface to the shocks. The resulting body of information is unique in that it provides insights into some important aspects of what structures can expect from earthquakes in this magnitude range. It is the kind of information usually acquired from the catastrophe of a large natural earthquake in a populated area.
- Although the general scheme of plate tectonics is beginning to be well understood, the details of how and where the plates collide are not. The intensive data-gathering effort in the Aleutians is providing those details for this seg-

BEFORE DETONATION—*Beneath this bleak Aleutian island of Amchitka, the Cannikin nuclear detonation provided scientists a unique opportunity to study seismic events of known yield, origin, and time of occurrence and has done much to advance the state of the seismological arts. Data amassed from the detonation provides insights into important aspects of what structures can expect from eathquakes in this magnitude range. Such information is usually acquired from a natural earthquake.*

AFTERSHOCK RECORDING—*The Cannikin test provided a record of an entire aftershock sequence, permitting scientists to view the beginning, middle, and end of the series over a comparatively short period. NOAA seismologists expect to extract significant new information on the causal mechanisms of aftershocks.*

ment of the Aleutian Island arc which marks the intersection of the Pacific and Bering crustal plates and, by extension, for similar boundary zones elsewhere in the world.

It appears from the records that global processes, and processes involving the entire Aleutian Island arc, are more important to earthquake activity here than such localized events as underground explosions.

Apparently, Cannikin did not interact with the large-scale processes which control the region's major natural earthquake activity.

The emergent theory of plate tectonics holds that a spreading seafloor, constantly replenished by material rising from the earth's mantle through oceanic rift zones, drives large crustal plates.

Where these "floating" plates converge, as along the western rim of the Americas, the oceanic plate thrusts under the continental plate. The high level of earthquake activity found in such zones is believed to be caused by stresses built up in the crustal material. When these stresses exceed the capacity of the supporting rocks, underground ruptures occur, releasing the energy of strain in the form of earthquake waves and dislocations along faults.

The Aleutian Island arc is a typical zone of convergence, and earthquake activity in the Amchitka Island region appears to be deeply rooted in the structural behavior of the entire arc and to global movements in general. Also, most of the natural earthquake activity occurs along a major thrust fault zone some tens of miles beneath the island; shallow earthquakes near Amchitka fall primarily where the oceanic plate begins its oblique downward thrust.

Measurements of stress and strain in Amchitka rocks also point to little or no serious interaction.

The Aleutian Seismic Program is conducted by the Earth Science Laboratories of NOAA's Environmental Research Laboratories headquartered in Boulder, Colo.

With the experiment concluded, the program now turns to a year of intensive data-gathering and analysis to assess what effects, if any, Cannikin had on the way stresses, strains, thrusting plates, and other processes interact to produce earthquakes in this highly seismic corner of America.

—*NOAA*

Billfish Symposium Set For Hawaii In August

A dialogue between scientists and sport fishermen concerning billfish will be provided by an International Symposium on Billfish to take place August 9-12 during the annual Hawaiian International Billfish Tournament at Kailua-Kona, Hawaii.

The billfish symposium, sponsored by the National Marine Fisheries Service of Commerce's National Oceanic and Atmospheric Administration, is planned to provide a forum for summarizing the status of knowledge of these species of fish (marlin, sailfish, etc.), present new information, and explore and define areas where further research is needed.

Scientists from the Honolulu Laboratory of NMFS assist in the annual tournament. —*NOAA*

Robert Gottschalk Assumes Post As U.S. Commissioner Of Patents

Robert Gottschalk has assumed the post of Commissioner of Patents under a recess appointment by the President to succeed William E. Schuyler, Jr., who resigned August 25, 1971. Gottschalk has been Acting Commissioner since that date.

He joined the Patent Office May 20, 1970, as Deputy Commissioner. From 1965 until his appointment to that post, he was Director of Patents for GAF Corporation. Prior to that he was managing director of his own firm, Robert Gottschalk Associates in Chicago.

Following his graduation from McGill University in 1931, where he received a bachelor's degree in electrical engineering, and an LL.B. from St. Lawrence University in 1934, he entered into private practice of patents and trademarks law.

In his early career, he served Corn Products Company, Standard Oil of Indiana, and the Canteen Corporation in patent posts.

Gottschalk is a member of the bar of New York and Illinois. He has served as consultant to the Chairman of the Government Patents Board, as chairman of various committees of the American Bar Association, the National Academy of Sciences, and the National Association of Manufacturers. He has also lectured on patents and management at the University of Chicago, Northwestern University, the University of Illinois, and the American Management Association.

Commissioner Gottschalk

He is a native of New York City where he was born in 1911.

—Patent Office

Building Engineers' Report Calls For Updating Design Regulations

Updating building codes, construction inspection of critical facilities by a structural engineer, and design of critical facilities so that they can remain functional after a severe earthquake. These are among the recommendations made by an engineering report of the 1971 San Fernando, Calif., earthquake just published by the Building Research Division of Commerce's National Bureau of Standards.

The report is the work of a team of engineers assigned to the disaster area at the request of the Office of Emergency Preparedness shortly after a severe earthquake struck the San Fernando, Calif., area February 9. It is hoped to be useful in planning future construction in such earthquake-prone areas.

After careful study of the San Fernando area, the engineers agreed that present procedures used to update design regulations should be evaluated to find more expeditious ways to incorporate new knowledge into design. At the Olive View Medical Center, for example, the Psychiatric Unit collapsed, they believe, because of insufficient first-story column shear strength. The stresses used in the design were based on an older building code. Had those incorporated in a 1966 code been applied, which require the use of additional lateral reinforcement in the columns, the report states that the collapse could possibly have been prevented.

The team recommends that evaluation of the earthquake hazard of structures built under old building codes should begin immediately. This is particularly important for critical public buildings. They cite the collapsed San Fernando Veterans Administration hospital buildings which were built well before the existence of earthquake requirements. Critical public buildings should be scheduled for rehabilitation or removal, the report adds.

Design requirements of hospitals, emergency services such as fire and police, utilities, communications, transportation networks, schools, and high occupancy buildings should reflect the importance of the facility and the degree of danger involved in its failure, the report points out.

Four hospitals in the area of the earthquake were unable to function because of damage. Water, sewage, gas, and electric facilities were severely damaged in the San Fernando Valley as were bridges important as potential evacuation routes. Disrupted power and telephone switching equipment added to the seriousness of the situation.

Deformation and deflection, as well as strength, should be considered in earthquake-resistant design, engineers feel. This is illustrated by the horizontal and vertical movements which caused bridge girders to move off their supporting abutments and piers. Ground displacements must be

BROKEN LINES—*Broken gas, water, and sewer lines are repaired in San Fernando following the severe earthquake. The engineers' report recommends the future use of flexible joints and automatic cut-off valves to forestall seepage of water and sewage into gas lines which fracture during such earth movements.*

studied carefully to determine appropriate magnitudes of movement which should be accounted for in design.

Hazards of falling light fixtures, emergency lights, suspended ceilings and other overhead objects should also be given engineering consideration, according to the report.

It also calls for more adequate tying together of units where large openings in walls are provided for garages or entranceways as this was found to be a particular weak spot by the surveyors. Chimneys, too, should be adequately reinforced and anchored to the main structure. And the report calls for the development of improved methods for supporting mobile homes.

The adequacy of present design requirements for the seismic design of dams should be reviewed, says the report, citing the near-failure of the Lower San Fernando Dam located above a densely populated residential area. All existing dams located close to a dense population should be examined for strength and stability due to ground faulting and acceleration.

The report recommends flexible joints and automatic cut-off valves to forestall seepage of water and sewage into gas lines which may fracture during severe ground movements. Proper anchorage of heavy electrical equipment to structural elements of a building is essential, says the report.

INSUFFICIENT STRENGTH—*A reinforced concrete column of a hospital failed because of insufficient shear strength, the design of which was based on an old building code.*

Design of elevator systems should be reviewed to insure their operation after a disaster. During the San Fernando earthquake, many elevators were put out of commission. Had the quake occurred during hours of heavy use instead of six o'clock in the morning, lives would have been endangered. Had fires occurred, the passengers of immobile elevators almost surely would have died.

The report concludes that an expanded and improved seismograph network be installed in public buildings in earthquake-prone regions throughout the U.S. Information provided by the strong-motion seismograph is the single best source of scientific data that can be used in post-earthquake studies of structure performance, engineers point out.

—National Bureau of Standards

Tuna Net Technique Cuts Porpoise Deaths During Pacific Tests

A new technique for reducing the number of porpoises trapped in large tuna nets has lowered porpoise mortality by 75 percent in recent tests conducted by Commerce's National Marine Fisheries Service and the U.S. Navy.

A net modification that permits the escape of trapped porpoises was tested in a month-long study aboard a chartered commercial tuna vessel.

During the same cruise in the Eastern Pacific, miniature radio transmitters were attached to porpoises to study their movements.

Schools of yellowfin tuna are the mainstay of the U.S. fishing fleet based at San Diego, Calif. Yellowfin tuna make up about half the total tuna catch by U.S. fishermen, and more than 90 percent of the yellowfin is now caught by large nets, called purse seines. The tuna frequently swim beneath schools of porpoise which are visible at the surface in tropical waters. Know-

ing this, fishermen set their nets accordingly.

In the process, they may capture part of the porpoise school, and some porpoises become entangled deep in the net before they can be released. Being mammals, the porpoises suffocate without air. Porpoise mortality has been a matter of increasing concern to commercial tuna fishermen and scientists for several years, particularly since purse seines began replacing pole and line tuna fishing.

The modification used involves insertion of a strip of smaller mesh netting in the back end of the large net. This smaller mesh prevents porpoise snouts and flippers from being tangled in the net and increases the effectiveness of an established procedure of porpoise release, called "backing down." In backing down, the fishing vessel maneuvers in such a way that the float line at the back end of the net sinks beneath the water surface, allowing the porpoise to swim out over the top of the net while the tuna remain inside.

Tests are continuing with the cooperation of the Navy and the tuna fishermen since additional data must be accumulated using this new device.

California Firm Wins Digitizing System Bid

Calma Company of Sunnyvale, Calif., has received from Commerce's National Oceanic and Atmospheric Administration a $142,000 contract to produce a graphic digitizing system employing computer control to be used in the production of nautical charts.

NOAA's National Ocean Survey charts the nation's coastal waters and Great Lakes, describing depths, shorelines, and other navigationally important features as they are revised by man and nature. Graphic data delineating underwater obstructions, channel changes and the construction of piers and docks are provided by NOS field units and by outside sources for inclusion on nautical charts.

Computer processed

The new system, known as a Nautical Chart Graphic Digitizing System, accepts the various types of graphic information and converts it to machine-readable format which can then be processed by computer to become part of the data file from which new and updated nautical charts are produced.

The National Ocean Survey produces some 2.7 million nautical charts in updated form each year for those who use the sea and Great Lakes. —*NOAA*

Ocean Clam Fishery Established To Meet Increased Demand

Public demand for a greater variety of frozen and processed seafoods has produced a steady and profitable market for ocean quahogs, large deepwater clams found off New England, so much so that a quahog fishery has been developed with the aid of researchers from the National Marine Fisheries Service of Commerce's National Oceanic and Atmospheric Administration.

Studies of the quahogs have been carried out jointly by the Service's Northeast Fisheries Center at Woods Hole, Mass., and its Atlantic Fishery Products Technology Center at Gloucester, Mass.

Abundant quantities

Existence of ocean quahogs (an Algonquin Indian word meaning "hard clam") in abundant quantities on the Continental Shelf off New England has been known for many years. Efforts to establish a fishery for the large clams have been pursued intermittently.

NMFS researchers have studied ocean quahog populations off the middle and northeast Atlantic coast on a number of exploratory surveys, and have ascertained that quahog beds are profuse along the Shelf from Cape Hatteras, N.C., to the Arctic Ocean at depths ranging from 6 to 90 fathoms. Quantities are so great, they say, that U.S. production could reach a sustained annual yield of about 150 million pounds of meats. Such a large catch, however, would be predicated upon a greatly increased market demand or a shortage of other clam species.

Shellfish processors generally prefer the traditional and more expensive hardshell, softshell, and surf clams, harvested in inshore waters. These more popular species, however, have been subject to population fluctuations in past years, some of which worked a hardship on New England fishermen and seafood processors. The ocean quahog fishery, therefore, may represent an "ace in the hole" in the event that unpredictable shortages again occur among the better known species.

Demand grows steadily

The demand for ocean quahogs (also called black or mahogany clams) has grown steadily for the past three years. In 1969, fishermen in Rhode Island and Connecticut earned $69,000 for 472,000 pounds of quahog meats; in 1970 figures rose to $251,000 and 1.4 million pounds of meats; partial totals for 1971 (through September) show a value of $196,500 for 1.1 million pounds.

Increased demand for the inexpensive ocean quahog has caused about a dozen New England boats to fish regularly for the clams to fulfill orders from seafood processors for specific quantities. An advantage to fishermen is the rapidity with which the clams can be harvested, owing to the density of the beds. Fishing methods used to harvest the ocean quahog employ the same clam dredge (often called the "Fall River rocking-chair") used on inshore beds. —*NOAA*

Patents Of Special Interest

Recent patents issued by the U.S. Patent Office include:

Electronic teaching system. A teaching system in which there is provided an instructor's console and a number of student stations. The console is provided with a number of lesson sources which are selectively transmitted to and received by the student stations. The student stations also have means for connecting a number of lesson sources directly to the station. The console and stations are also provided with means for providing an intercom link selectively actuatable for connection between the console and any one or all of the student locations where an instructor can monitor and converse with any one or all of the students at the stations. Means are also provided at each station where any student can, in addition to conversing with the instructor, hear his voice projected into the system. Patent No. 3,623,242 issued to Edwin L. Hoover, Dayton, Ohio, and assigned to Duncan Electric Company, Inc., Lafayette, Ind.

Grain drying apparatus. A grain drying and storage bin that receives and evenly distributes grain over an upper floor grid where the grain is heated and dried. After drying is completed, the grain is transferred to a lower cooling floor by actuation of a linkage mechanism that simultaneously opens a number of openings in the upper grid. Patent No. 3,624,921 issued to Harlan J. Easton, Route 3, Box 607, Blooming Prairie, Minn. 55917.

Recreational vehicle. An all-terrain recreational vehicle which is capable of operating on water, on very soft terrain and on rough terrain. Three low-pressure tires are journaled on each side of a watertight fiber-reinforced plastic body. All wheels are driven by a rear-mounted engine and steering is accomplished by declutching and braking the wheels on one side or the other of the vehicle. The wheels are journaled directly on the plastic body without separate framing making it possible to have a low operating center of gravity. Overload slip clutches at each wheel prevent excessive strain from being applied to the suspension system or the power transmission system. A belly pan formed of tough abrasion resistant plastic is mounted on the vehicle body for impact and abrasion resistance. The transmission system includes parallel chain drives extending along each side of the vehicle, each driven by the engine through a separate clutch and brake mechanism. The clutch and brake mechanisms are selectively operated for steering by hydraulic pressure developed in response to steering wheel movement and are operated simultaneously by a hydraulic-brake system for braking. The engine is mounted on a floating frame to minimize noise and vibration transmission and to provide tensioning of the primary drive chains. The throttle system is arranged for direct actuation in combination with a governor which acts only to prevent overspeeding. Patent No. 3,623,565 issued to Eugene T. Ward, Highland Heights, Ohio; Richard Sklar, Cleveland Heights, Ohio, and Harvey H. Pierman, Chardon, Ohio, and assigned to Action-Age, Inc., Warrensville, Ohio.

Prevention of theft of portable articles. Unauthorized removal of a portable article from a vehicle is prevented by attaching the article to the vehicle steering column with a flexible elongated cable. An adjustably sized loop at one end of the cable encircles the steering column, and the other end of the cable is connected to a lock which engages a bracket on the portable article. The bracket is attached to the portable article by a fastener which has a threaded shank and a recessed head for receiving a fastener-rotating tool. Access to the recess by a tool is obstructed by a pin on the lock which passes through apertures in the bracket. Patent No. 3,625,031 issued to Granville M. Alley III, P.O. Box 1427, Tampa, Fla. 33601.

Method of treating and purifying air. A method for treating and purifying air by means of a series of different spray treatments resulting in the residue from each spray treatment being delivered to a different sump tank. Patent No. 3,616,597 issued to Solomon L. Stewart, 4902 W. Bethany Home Road, Glendale, Ariz. 85301.

Abstracts and drawings of patents are published as they are issued in the *Patent Official Gazette* each Tuesday. More than 1,600 patents are issued each week. Trademarks are published in the *Trademark Official Gazette*. Copies of the *Patent Official Gazette* and the *Trademark Official Gazette* may be obtained from the Superintendent of Documents, GPO, Washington, D.C. 20402.

Science Calendar

March 1-3—Washington, D.C.—Shoreham Hotel. 13th Scintillation and Semiconductor Counter Symposium. Sponsored by Nuclear Science Group of the Institute of Electrical and Electronics Engineers, Atomic Energy Commission, and the National Bureau of Standards.

March 1—Gaithersburg, Md.—National Bureau of Standards. IEEE Computer Society.

March 22-24—Gaithersburg, Md.—National Bureau of Standards. Conference on Accuracy in Spectrophotometric, Fluorometric, and Phosphorometric Measurement.

April 24-27—Washington, D.C.—American Physical Society, Sheraton-Park Hotel.

January 24, 1972

International Commerce

- Quarterly World Market Report
- Survey points to trade turnaround targets
- Selling in the Ivory Coast
- Worldwide monetary realignment
- Second half, world trade fair list

U.S. Companies Put Tools Into Action To Gain Latin Sales

Newsmemo

A Foreign Projects Reference Room is now open in Washington to help U.S. firms seeking to compete on major undertakings overseas that include sizable procurement of goods and services. The Office of International Business Assistance in Commerce Department has brought together a wide range of materials on projects such as those being readied with funds from the World Bank and other multinational lending institutions. The materials, including procurement regulations, registration forms and project summaries (plus details on such U.S. agencies as Eximbank, OPIC and AID), are all in Room 3411 in the main Commerce building, phone 202-967-3600.

More than a billion dollars in export value of overseas business efforts assisted to successful conclusions! That's the track record over the past 15 months of the specialists in the Office of International Business Assistance mentioned above. With their help in unraveling the mazes that sometimes surround international projects, American companies are now at work overseas on such things as highways, airports, communications nets, hydroelectric and mining developments. Firms interested in getting into the 2nd billion of activity should call the Director, OIBA, on 202-967-5131.

In export statistics as in shoes, it is the snugness of the fit that matters. Thus the Census Bureau keeps refining the commodity classifications in its all-important Schedule B system that reflects the products exported from the U.S. Suggestions from U.S. producers on statistical breakouts or other changes in the current Schedule B classifications are being received by the Census Bureau's Industry and Commodity Classifications Staff, Washington, D.C., 20233 for use in the January 1973 revision. Deadline is April 30.

Greetings to the monthly "Canada Commerce," successor to the widely read fortnightly "Foreign Trade." Canada's Department of Industry, Trade and Commerce continues a publishing history with its new magazine that began in 1904. To the previous mix of export sales leads and overseas market data, "Canada Commerce" is adding articles on business developments within the Dominion.

A promising sign that there is renewed steam in the U.S. export drive comes from the trade press field. Keller Publishing's ad volume for two international new product magazines is up sharply this month. "Reportero Industrial" and "World Industrial Reporter" show a 35 percent increase in ads this January over the same month last year, each hitting all-time highs. Keller believes the dollar devaluation and other Administration foreign trade moves are back of the big boost.

International Trade Winds

ENGINEERING—Black & Veatch International, Kansas City, has been awarded a contract by the Electricity Generating Authority of Thailand for design and field construction support of a fourth addition to the South Bangkok Thermal Plant. Controls for the 360-megawatt unit are being supplied by Westinghouse Electric. The first three units at the station, totaling 840 megawatts, were also designed by Black & Veatch. The fourth unit is scheduled for completion in 1976.

REFRACTORIES — Chas. Taylor Sons Co., Cincinnati, a subsidiary of N L Industries, Inc., has completed the largest overseas shipment of high temperature refractories in its history. Ten million pounds of bonded mullite brick and checkers, sent from Ashtabula, Ohio to Argentina, assisted the construction of a second blast furnace complex at the General Savio Steel Works. Contractor on the expansion project is Cleveland-based Arthur G. McKee & Co.

ENGINEERING — The M. W. Kellogg Co., Houston, a division of Pullman, Inc., reports that a methanol plant described by Kellogg as Japan's largest, for which Kellogg provided basic design and process engineering, has gone onstream in Osaka. Nishi Nihon Methanol Co. Ltd. will produce methanol from butane in the giant facility, which has a design capacity of 1,000 metric tons per day.

CONSTRUCTION MATERIALS—Panelfab International Corp., Miami, has announced the signing of a manufacturing and distribution agreement with Panelfab Lux S.A. Under the agreement, the Belgian firm will establish a factory in Belgium for the manufacture, and distribution in Africa and Western Europe, of structural building panels and components under license from Panelfab International.

EARTHMOVING EQUIPMENT—New Zealand's Ministry of Works has placed an order with Caterpillar Tractor for $3 million worth of heavy equipment for the Upper Waitaki Valley Power Development project. The order, consisting of 14 50-ton trucks and three 10-yard front-end loaders, will be shipped from Caterpillar's Peoria, Ill. plant.

Worldwide Import Growth Easing; U.S. Share Drops

Import demand in the world's leading trading nations remained strong in the last 12 months for which data are available—generally through September or October of last year—though the increases in value were not so marked as they had been in 1970 and in the earlier months of 1971. Price rises continued to account for a sizable portion of the expansion.

Arrivals of U.S. goods, hindered by strikes at American ports, advanced more slowly than those from other suppliers in many countries. In several major markets, they even declined in value compared to the preceding 12 months. As a result, the U.S. share dropped in numerous markets, including almost all of our top ten partners. Share gains, however, were rather widespread in the smaller outlets.

The economies of most industrialized countries remained unresponsive to efforts to correct the widespread problems of sluggish production, unemployment, and inflationary pressures. Only Canada and France exhibited signs of strength. The general slowdown, already evident earlier in the year, continued through recent months. Investment plans were re-appraised or curtailed in many developed nations as business confidence failed to strengthen.

The shifts in exchange rates, both actual and expected, created further uncertainty. All of these factors adversely affected U.S. exports. In addition, the dock strikes in this country disrupted the flow of U.S. goods abroad in the last half of the year.

Seven of the top ten foreign trading countries posted import increases of 10 percent or more in value. German and Dutch purchases were particularly expansive. Imports into Japan, on the other hand, advanced in the 12 months ending October by only 5 percent and those into Sweden rose just 3 percent.

Three of the smaller European countries — Yugoslavia, Austria, and Ireland — recorded increases of one-fifth or more, but in others, import growth, if any, was minimal.

The majority of the developing countries listed on the accompanying table, from which data for some part of 1971 are available, reported strong imports. The expansion in arrivals was largest for Nigeria, Korea, Taiwan, and Egypt. Mexico, the biggest market for U.S. products among this group, increased its purchases by 17 percent both from this country and from other suppliers.

Major traders expand imports

Despite sluggish industrial growth, German imports advanced sharply in the 12 months ending October 1971. U.S. deliveries kept pace, so that this country's share remained at nearly 11 percent. Arrivals of American aircraft were particularly expansive, as were those of computers and related equipment and parts. Tobacco, soybeans, wheat, corn, and animal feedstuffs purchased in the United States also increased notably.

PHOTO ON PAGE 35—A Department of Commerce-directed trade mission that offered U.S. finishing tools to buyers in Panama, Colombia and Venezuela added an extra sales note by demonstrating the tools at various construction locations. Leo Sackett, Goldblatt Tool Co., Kansas City, Kan., shows customer an array of his trowel trades tools at a Bogota work site. Story is on Page 43.

Demand for our industrial supplies, in contrast, slowed as manufacturing output held virtually steady. There was also a sharp decline in purchases of steel which were abnormally high in 1970.

Dutch imports, spurred by strong demand and inflationary pressures, grew rapidly. Contrary to the policies of many other nations, the Government recently removed its less-than-successful wage and price controls and left market forces free to influence the economy. With general stagnation in industrial output, purchases of organic chemicals, nonferrous metals, and textile yarns from this country declined.

On the other hand, U.S. aircraft, office machines, corn, and soybeans registered significant gains. Nevertheless, the growth in purchases from this country was slower than that from others, and our share of the total dropped.

Although the U.S. share of the import market also declined slightly in Canada, it was the only large industrial country to which U.S. sales increased at a faster rate than in the previous 12-month period. Arrivals of automobiles and parts, which had been delayed by the GM strike at the end of 1970, expanded rapidly.

Further, strong demand for the smaller, American-type cars, extensively manufactured by Canadian subsidiaries, caused large imports from parent companies of parts for assembly.

Arrivals of construction and mining equipment and agricultural tractors also rose. Coal purchases climbed, largely as a result of higher prices, while imports of aircraft, corn, and wheat, mainly for transhipment, declined.

U.S. exporters failed to keep pace with other competitors in the French market, and our share fell. Arrivals of aircraft and nonferrous metals declined; demand for U.S. steel dropped from its exceptional 1970 levels. Conversely, purchases of computers and parts

rose briskly, while the growing French effort to bolster livestock production increased the inflow of soybeans and animal feedstuffs.

Through October, Japanese and British demand for U.S. goods declined in value from the level of the previous 12-month period, although total overseas purchases by those countries continued to rise. U.S. suppliers of iron and steel scrap, coal, nonferrous ores and metals, and logs felt the slowdown in Japan's industrial machine in 1971. Shipments of corn also slackened, as requirements dropped and competing suppliers provided a larger share.

Tempering these losses, however, were stepped-up purchases of aircraft, soybeans, and cotton. Lower imports of copper, steel, and office machines into the United Kingdom compared to the preceding year accounted for a large part of the decline in U.S. sales to that country.

In Italy, the U.S. share dropped as imports from this country did not rise, while total foreign purchases expanded by 8 percent. Moderate increases in imports of various American agricultural products were more or less matched by cuts in aircraft, steel, and copper.

Among the smaller developed nations, Finland, Ireland, and Austria each increased its purchases from the United States by about 30 percent. These gains, based primarily on higher deliveries of aircraft, exceeded those from other countries, and strengthened the U.S. position. In Yugoslavia, rising purchases of soybean oil, wheat, and corn helped boost imports from this country by 87 percent, more than three times faster than the gain from other suppliers.

Imports into Spain have grown, but only modestly, since the lifting of the import deposit scheme in July. Goods from the United States dropped by 12 percent in the 12 months ending November 1971 because of lower purchases of aircraft, steel, and corn. Our share of that import market fell sharply as a result of these contrasting growth rates.

Israel's strong economic growth helped explain a one-sixth rise in imports in the 12 months through last July. Arrivals from the United States climbed even more strongly on the strength of large purchases of aircraft, telecommunications equipment, soybeans, and grain sorghums.

Among the developing nations in Asia, Singapore, Taiwan, and Korea expanded imports with particular rapidity. Though Korean growth has slowed following strong expansion in the first half of 1971, imports remained buoyant through October. Nevertheless, the U.S. position weakened despite significant increases in purchases of our wheat, rice, cotton, and aircraft.

In Taiwan, the U.S. share of the import market rose slightly as arrivals grew by about one-fourth. Singapore's economy continued to

World Market

The 50 markets below accounted for 91 percent of 1970 imports into

Values in millions of dollars — Published

Country	1970 Imports			1971 Imports January through latest month				Import change in latest available 12-month period *		Reserves at end of third quarter	
	From world	From U.S.	U.S. share %	Latest month	From world	From U.S.	U.S. share %	From world %	From U.S. %	1970	1971
Germany, Fed. Rep.	29,817	3,293	11.0	Oct.	28,192	3,040	10.8	+ 16	+ 16	11,301	16,956
United Kingdom	21,724	2,816	13.0	Oct.	19,496	2,245	11.5	+ 10	— 3	2,666	5,013
France	18,918	1,897	10.0	Oct.	17,307	1,549	9.0	+ 11	+ 3	4,743	7,310
Japan	18,883	5,565	29.5	Oct.	16,049	4,109	25.6	+ 5	— 7	3,997	13,384
Italy	14,939	1,543	10.3	Sept.	11,660	1,114	9.6	+ 8	— 1	4,524	6,666
Canada	14,500	10,311	71.1	Nov.	15,378	10,811	70.3	+ 13	+ 11	4,553	4,992
Netherlands	13,391	1,308	9.8	Aug.	9,952	931	9.4	+ 17	+ 10	2,989	3,609
Belgium-Luxembourg	11,362	995	8.8	Sept.	9,074	616	6.8	+ 11	— 1	2,790	3,424
Sweden	7,005	609	8.7	Sept.	5,097	435	8.5	+ 3	+ 1	671	998
Switzerland	6,483	552	8.5	Oct.	5,982	455	7.6	+ 13	+ 2	4,511	6,549
Australia	5,086	1,292	25.4	Aug.	3,463	798	23.0	+ 5	+ 3	1,684	2,841
Spain	4,749	897	18.9	Nov.	4,564	721	15.8	+ 5	— 12	1,591	2,948
Denmark	4,384	327	7.5	Oct.	3,719	300	8.1	+ 7	+ 8	392	422
South Africa, Rep.	3,912	653	16.7	May	1,817	288	15.9	+ 18	+ 15	1,190	754
Norway	3,697	267	7.2	Oct.	3,275	204	6.2	+ 11	— 2	706	1,122
Austria	3,549	121	3.4	Oct.	3,501	133	3.8	+ 22	+ 28	1,672	2,231
Hong Kong	2,905	382	13.2	Oct.	2,782	359	12.9	+ 18	+ 10	(1)	(1)
Yugoslavia	2,874	160	5.6	Sept.	2,546	168	6.6	+ 29	+ 87	217	136
Brazil	2,849	918	32.2	....	....	....	....	+ 26	+ 35	1,077	1,577
Finland	2,636	137	5.2	Sept.	1,940	94	4.8	+ 12	+ 30	424	579
Mexico	2,461	1,568	63.7	Mar.	592	375	63.2	+ 17	+ 17	653	[2] 922
Singapore	2,461	266	10.8	Sept.	2,124	268	12.6	+ 18	+ 39	279	[2] 325
India	2,125	622	29.3	Mar.	588	136	23.1	+ 5	— 2	1,081	1,128
Korea, Rep.	1,984	585	29.5	Oct.	1,983	574	28.9	+ 28	+ 21	618	572
Greece	1,958	116	5.9	Sept.	1,474	80	5.5	+ 10	— 6	314	452

Note: The countries shown above include the 50 major importers of U.S. merchandise in 1970 for which current data are available. In order to present comparable statistics for all countries, import data have been adjusted from an f.o.b. to a c.i.f. valuation for Australia, Canada, Panama, Philippines, Republic of South Africa, and Venezuela. Reserves include official holdings of gold and foreign exchange, the gold tranche position, and Special Drawing Rights in the International Monetary Fund.

A report on the value of total imports into all of the major free-world foreign markets for which current statistics are available, and the U.S. share of those markets, is published quarterly in* Commerce Today. *The preceding report appeared in the Oct. 18, 1971, issue.

Report Bureau of International Commerce

all free-world foreign markets and 94 percent of imports from the U.S.

quarterly

Country	1970 Imports			1971 Imports January through latest month				Import change in latest available 12-month period *		Reserves at end of third quarter	
	From world	From U.S.	U.S. share %	Latest month	From world	From U.S.	U.S. share %	From world %	From U.S. %	1970	1971
Venezuela	1,919	938	48.9	....	....	....	....	+ 10	+ 7	937	1,279
Argentina	1,685	419	24.8	Aug.	1,260	295	23.4	+ 9	+ 11	706	459
Iran	1,632	217	13.3	June	875	105	12.1	+ 3	— 7	217	327
Ireland	1,569	110	7.0	Sept.	1,367	130	9.5	+ 19	+ 29	754	898
Portugal	1,556	107	6.9	Sept.	1,081	80	7.4	— 1	+ 3	1,461	1,726
Taiwan	1,524	364	23.9	Aug.	1,117	267	23.9	+ 24	+ 26	575	539
Israel	1,451	326	22.5	July	1,044	267	25.6	+ 16	+ 19	456	714
Thailand	1,293	193	14.9	June	621	102	16.4	— [3]	+ 4	943	878
New Zealand	1,245	167	13.4	Sept.	998	105	10.6	+ 14	— 7	154	297
Philippines	1,209	355	29.4	Sept.	958	256	26.7	+ 1	— 3	199	338
Pakistan	1,129	361	31.9	Sept.	726	191	26.3	— 9	— 25	213	215
Malaysia [4]	1,104	92	8.3	June	535	35	6.5	+ 8	+ 42	725	791
Nigeria	1,059	154	14.5	Apr.	484	72	14.9	+ 63	+ 89	185	297
Chile	931	344	37.0	....	....	....	....	+ 3	— 1	465	[2] 278
Turkey	886	172	19.4	Sept.	837	96	11.5	+ 34	— 1	282	562
Colombia	844	390	46.2	....	....	....	....	+ 23	+ 25	252	166
Egypt	787	48	6.1	May	438	30	6.8	+ 22	+ [3]	137	[2] 187
Peru	619	199	32.2	Sept.	558	170	30.4	+ 10	+ 4	315	232
Libya	554	[5] 85	[5] 15.4	....	....	....	....	— 18	— 32	1,554	2,483
Viet-Nam, Rep.	550	[5] 244	[5] 44.3	....	....	....	....	— 18	— 6	245	256
Trinidad & Tobago	543	89	16.4	June	301	48	15.8	+ 15	+ 51	41	63
Jamaica	522	226	43.3	Feb.	82	36	44.0	+ 16	+ 21	185	195
Panama	353	139	39.3	....	....	....	....	+ 16	+ 19	230	[6] 419
Costa Rica	317	110	34.8	....	....	....	....	+ 29	+ 28	19	27
Ecuador	248	81	32.6	Jan.	21	7	34.9	— 6	— 6	94	55

* Compared with preceding 12-month period.
[1] Not available. [2] End of August. [3] Less than 0.5 percent. [4] Import data are for West Malaysia only.
[5] Estimated from partial year data. [6] End of June.
Source: Official trade statistics of listed countries. International Monetary Fund, *International Financial Statistics.*

expand, based on rapid growth as a manufacturing center and entrepot and on new petroleum exploration and construction. Purchases of U.S. capital goods for these sectors increased, as did those of aircraft.

U.S. deficit buoys reserves

As of Sept. 30, 1971, official reserves of the major U.S. trading partners totalled $98.6 billion, up more than 50 percent from their level a year earlier. This country's payments deficit and, to a lesser degree, the International Monetary Fund's second allocation of Special Drawing Rights (SDR's) were responsible for most of the $33 billion gain. The U.S. deficit in the third quarter of 1971 alone amounted to nearly $13 billion. Although all but a few countries shared in the growth of reserves, industrialized nations accounted for the vast bulk of the increase.

Japanese holdings grew by nearly $10 billion during the 12 months ending last September. Over half of the increase occurred in the third quarter of 1971 and stemmed from two main factors: (1) large inflows of funds, recorded and unrecorded, reflecting speculation against revaluation of the yen, and (2) a current account surplus of more than $2 billion.

German reserves reached $17 billion at the end of September. Most of the increase took place prior to the floating of the D-Mark in May, and reflected shifts of speculative funds and a continuing strong trade position. The gain during July-September was relatively nominal. The current account was in deficit that quarter despite a sizable trade surplus. Inflows of private long-term capital, largely movements of intercompany funds, more than countered this negative balance, however, to make possible a moderate increase in holdings.

A flow of speculative capital pushed French reserves past the $7 billion mark. The introduction in August of a two-tier exchange market helped stem further inflows. The United Kingdom boosted holdings by more than $2 billion on the strength of an influx of short-term funds and a strong export performance. Italy did nearly as well; its increase would have been greater except for repayments of loans. Record shifts of foreign funds, especially in early August, swelled Swiss reserves by $2 billion and, as in France, led to measures designed to curb further movements. Among smaller countries, Spain increased its holdings substantially on the strength of tourist receipts and a favorable trade balance.

Libya led all developing countries with a rise of more than $900 million in its reserve position, attributable to increased oil revenues. Venezuela, too, increased reserves significantly for this reason, even though a sharp increase in imports cut into its trade surplus. Brazilian holdings also grew notably as the booming economy attracted outside capital.

The Republic of South Africa incurred the largest reserve losses. The virtual halt in the inflow of foreign capital, combined with fast-rising imports and sluggish exports, was to lead the Government to tighten import controls later in the year. Argentina and Chile also suffered sizable drains in their holdings.

Trade Turnaround Targets: Survey Dissects U.S. Slide

A newly completed world trade survey has confirmed in detail the recent trend in competitors' gains against U.S. exporters. Reversal of this pattern is a prime objective of the Administration's New Economic Policy.

Highlights of the survey, which compares figures in world trade in manufactures for 1969—latest detailed yearly data available—with those for the 1962-64 period, include:

► In the face of increasingly sharp competition, the U.S. share of world exports of manufactured goods to markets outside this country has declined—significantly.

► The United States, nevertheless, remains the principal supplier to such markets but Germany has surpassed it in total exports of manufactures. Japan and Italy are expanding their roles in world trade even more rapidly.

► Exporters in this country have been able to capitalize on sharp expansion of demand in Japan and Canada.

► Technologically advanced products, such as aircraft, computers, and instruments, comprise bulwarks of U.S. export gains. But in many markets they are being displaced by foreign-made products.

► Rapidly growing intra-EEC (European Economic Community) trade has eroded the U.S. position in the lucrative Common Market.

U.S. sales rise, share falls

Over the survey period, the U.S. share of world exports of manufactures declined markedly even though this country's deliveries of such goods rose by about four fifths to $27 billion. Shipments by the 14 top trading nations—the U.S., Japan, Canada, and 11 in Europe—to destinations other than this market meanwhile grew at a more robust rate of 93 percent to exceed $120 billion.

With 22.3 percent of the foreign market, the United States still commanded the largest segment of the trade in manufactures in 1969, but its lead had narrowed substantially. The positions of the United Kingdom and France also weakened. Germany, expanding its share to nearly one fifth, was the second principal supplier by a wide margin and scored a sales advance only slightly smaller than the U.S. gain of $11.9 billion. Among other major traders, Japan and Italy experienced the most rapid growth in exports and enlarged their roles in the manufactures market.

In 1970 (beyond the period of the detailed survey) the U.S. share again declined by more than a percentage point while the Japanese, German, and French positions improved. Although this country remained the ranking supplier of manufactures to foreign markets, Germany became the leader when shipments to the United States are included in world sales. During the first nine months of 1971, U.S. exports were only moderately higher than for the same period in 1970 and this country continued to lag behind other suppliers.

Manufactures Market: U.S. Share Declines

Year	World exports Value $ million	U.S. exports Value $ million	U.S. exports Share * Percent
1962-64 average	62,432	15,004	24.0
1965	77,248	17,648	22.8
1966	84,889	19,510	23.0
1967	90,503	21,090	23.3
1968	102,158	24,113	23.6
1969	120,751	27,132	22.5

Note: Preliminary data show a U.S. share of 21.3 percent in 1970 and 20.7 percent in the first half of 1971.
* U.S. share of exports of 14 leading suppliers to markets outside the United States.

The U.S. standing in world markets for manufactures has been strengthened significantly by the nation's ability to design and produce a wide range of technologically advanced products. The United States has also benefited from its principal supplier's position in the rapidly expanding markets of Japan and Canada.

More than offsetting these favorable factors, however, have been the rapid expansion of industrial facilities in other manufacturing nations and the increasing tendency of EEC members to sell to each other. A greater dependence of U.S. exporters on the slow-growing Latin American market has had a similar effect.

Consumer goods lead growth

The most expansive products in world trade since the early sixties have been a group of miscellaneous manufactures linked together in this survey and made up largely of nondurable consumer goods, including sound recorders and reproducers, plastic articles, furniture, photographic equipment and supplies, and clothing. Exports of transport equipment, chemicals and allied products, and electric machinery have also grown rapidly.

Slower to rise have been shipments of basic manufactures (chiefly semi-finished products) and nonelectric machinery. The United States improved its competitive position only in sales of transport equipment, while sustaining its sharpest share loss in chemicals.

The U.S. share of the market for miscellaneous manufactures grew only in photographic items, held even in sound recorders and reproducers, and fell in the rest. Despite the substantial deterioration in its position as a supplier of this varied group of manufactures, the United States remained the second leading source after Germany.

The U.S. share in world exports of transport equipment expanded because of stronger U.S. perform-

ance in most developed countries. Except in Canada, this improvement stemmed principally from sales of aircraft.

Unlike most suppliers, the United States exported comparatively more automotive parts for assembly than complete passenger cars, supplying about 45 percent of the former in world sales, down slightly from the base period level. About three-fourths of U.S. car exports went to Canadian subsidiaries of American firms under the stimulus of the duty-free provisions of the automotive products trade agreement of 1965. Elsewhere, U.S. sales shrank to a mere 5½ percent of the total as exports of German, British, Japanese, and Italian models dominated most markets.

The United States is by far the largest supplier of aircraft, especially heavy transports. The $1.8 billion in planes (one third of which were military) and the $560 million in parts and accessories delivered in 1969 constituted 71 percent of world exports, a considerably larger share than earlier in the sixties. The U.S. position advanced in all developed areas, rising to nearly two thirds in the EEC.

Shipments of chemicals from the 14 suppliers doubled from 1962-64 to 1969, reaching $15.5 billion. Organics, plastic materials, and medicinals and pharmaceuticals were the action items, increasing their portion of the total to more than one-half. After dominating European markets for years, Germany moved further up and replaced the United States as principal supplier of chemicals to the world in 1969.

U.S. lags in chemicals

The U.S. share of the chemical market fell by one fifth to 22 percent over the period. The heaviest loss occurred in the EEC, the largest and fastest growing outlet, but the U.S. position also weakened in Latin America and Canada. American exporters strengthened their standing only in manufactured fertilizers among leading chemicals, largely through the help of AID programs.

Plastic materials proved the most rapidly growing chemical export, rising by nearly 150 percent. The U.S. share fell sharply, however, mainly because of weak performance in the important European market. Losses in Canada and Latin America further undermined the U.S. position.

Organics, the largest class of chemicals in international trade, was one of the few in which the United States continued to lead Germany and France in supplying the EEC even though its position there weakened steadily.

Exports of medicinals and pharmaceuticals from world suppliers doubled during the period to exceed $2 billion. Germany was the principal source except for antibiotics. The United States accounted for only 12 percent of total sales to the Common Market, the largest outlet, but for 26 percent of those from sources outside that area.

The United States has been the world's prime supplier of electric and electronic equipment, although lagging behind Germany in electric power generating machinery and Italy in domestic appliances. Despite an improvement in sales of electronic components and some items in the telecommunications field, the overall U.S. share in electric equipment declined.

While world exports of electron tubes, transistors, and other semiconductors rose more than threefold, U.S. sales climbed even faster, expanding to two fifths of the total and enhancing the American position in every major world market except the EEC. Outstanding gains were posted elsewhere in Western Europe and also in South and East Asia, where many of the deliveries were destined for assembly by affiliates into finished electronic products for export to the United States and other markets. A similar pattern applied to television and radio receivers as regards assembly and resale.

In the market for telecommunications apparatus other than radio and TV receivers, however, U.S. performance weakened. Reduced

U.S. Manufactured Goods Score Largest Export Gains In Canada

Markets	World exports, 1969 [1]	U.S. exports, 1969			
	Value	Value	Increase over 1962-64	Share	Share index 1962-64 = 100
	$ million	$ million	Percent	Percent	
Total [2]	120,751	27,132	81	22.5	94
EEC	40,005	4,526	72	11.3	80
Other Western Europe	27,750	3,321	79	12.0	97
Canada	9,448	7,501	134	79.4	103
South and East Asia	9,137	1,887	24	20.7	73
19 American Republics	8,092	3,900	47	48.2	95
Australia, New Zealand, S. Africa	5,390	1,238	64	23.0	104
Developing Africa	5,092	618	65	12.1	114
Eastern Europe	4,165	132	559	3.2	289
Near East	3,976	718	76	18.0	84
Japan	2,784	1,538	119	55.3	99
Other Western Hemisphere	1,290	513	94	39.8	108

[1] World exports are defined as those of the United States, the members of the European Economic Community, Austria, Canada, Denmark, Japan, Norway, Sweden, Switzerland, and the United Kingdom to markets outside the United States. Manufactured exports cover chemicals, machinery, transport equipment, and other manufactures (principally metals, textiles, and various nondurable consumer goods) and exclude processed food, fats and oils, mineral fuel products, firearms of war and ammunition.

[2] Includes other areas.

U.S. Posts Mixed Record In Exports Of Most Buoyant World Manufactures

Commodity	World exports, 1969[1] Value	World exports, 1969[1] Increase from 1962-64 average	U.S. exports, 1969 Share	U.S. exports, 1969 Share index 1962-64 = 100
	$ million	Percent	Percent	
Electron tubes, transistors, other semiconductors	1,041	222	41.7	142.6
Office machines	2,543	167	41.3	105.4
Plastic materials	3,169	148	18.6	68.6
Photographic, movie equipment and supplies	1,366	143	29.3	105.8
Aircraft and parts	3,419	132	70.9	117.3
Manmade fiber yarn, thread	1,706	126	6.0	36.2
Organic chemicals	3,499	124	25.9	81.1
Ships, boats, except warships	2,773	122	1.4	97.0
Aluminum	1,494	119	19.7	100.6
Clothing, except fur	2,642	116	8.4	63.7
Road motor vehicle parts; vehicles except cars and trucks	5,004	115	45.0	96.3
Passenger cars	5,972	113	17.1	156.1
Copper	1,874	111	15.1	60.9
Internal combustion engines, except aircraft types	1,828	109	36.1	131.1
Pumps and centrifuges	1,765	106	29.9	113.5
Pig iron, ingots, primary forms of iron or steel	1,303	105	18.4	225.4
Medicinal and pharmaceutical products	2,008	102	18.1	75.5

[1] World exports are defined as those of the United States, the members of the European Economic Community, Austria, Canada, Denmark, Japan, Norway, Sweden, Switzerland, and the United Kingdom to markets outside the United States. Manufactured exports cover chemicals, machinery, transport equipment, and other manufactures (principally metals, textiles, and various nondurable consumer goods) and exclude processed food, fats and oils, mineral fuel products, firearms of war and ammunition.

sales in the EEC led to a substantial share loss, while in South and East Asia Japan's export surge dwarfed the modest U.S. gain.

As Germany's share in world exports of electric power generating equipment and switchgear rose above one fourth, the U.S. position slipped below that level. A major factor was the sharp fall in sales to South and East Asia. In the EEC, U.S. share declined for the third successive year although remaining above the base period level.

While American exporters supplied 40 percent of world shipments of electric measuring and controlling instruments in 1969, they failed to match growth rates of Germany and other key suppliers. U.S. share losses in Western Europe were especially severe.

Although world shipments of nonelectric machinery were sluggish, U.S. deliveries grew even slower and this country's position weakened. The United States, nevertheless, remained the top supplier of this important line of products.

Nonelectric power generating machinery, mostly internal combustion engines for automotive use and jet engines for planes, constituted the largest group of nonelectric machinery. The United States boosted its lead in internal combustion engines, due mainly to large gains in the Canadian market. Only in the exceptionally expansive Japanese and EEC outlets did U.S. exports lag but even there share losses were marginal. U.S. exporters continued to supply about half the world's deliveries of aircraft engines as substantial advances in Canada and several of the developing areas countered erosion elsewhere.

In construction and mining equipment, the U.S. market position weakened. Sales to South and East Asia fell; those to Western Europe increased but not enough to forestall serious share declines, which also extended to Canada and Latin America.

World trade in office machines climbed by more than one and one-half times over the period to pass the $2.5 billion mark. The United States strengthened its position as sales of computers and related equipment surged. This country's share in global exports of office machines doubled in South and East Asia and made smaller but notable gains also in several other markets.

Deliveries of agricultural machinery, largely off-road tractors, were relatively listless, expanding by only about two fifths. U.S. sales rose even more slowly but still exceeded those of any other competitor. The largest share loss occurred in South and East Asia. In the EEC, the prime market for tractors, the U.S. position weakened slightly.

Although U.S. sales rose in most types of nonelectric machinery, they fell in the sensitive metalworking machinery sector. Germany widened its lead over this country as the principal supplier of machine tools, while the U.S. share fell in all areas except the small East European and Near Eastern markets.

Pumps and centrifuges ranked among this country's most dependable gainers in world markets, particularly in developing Africa and in the EEC. On the other hand, the U.S. position in world sales of heating and cooling machinery merely held even, while for mechanical handling equipment it deteriorated steadily.

Metal, textile growth lags

Basic manufactured products, predominantly iron and steel, nonferrous metals, and textiles still constitute the largest class of goods in world commerce despite their slow growth. At the close of the decade, metals and textiles alone made up a fifth of all manufactures shipped (this figure is based on a special compilation of exports from the 14 principal suppliers, other industrial nations, and developing areas to markets outside the United States).

Exports of iron and steel prod-

ucts approached $12 billion in 1969, with the United States posting its best gain of the period in both sales and share of the market. After slipping to around 6.5 percent in the late sixties, the U.S. portion of total sales expanded to more than 8 percent in 1969, stimulated chiefly by the then intense demand in Western Europe and Japan, especially for primary forms. In the important South and East Asian markets, however, U.S. sales and share continued downward in the face of Japanese competition.

In worldwide sales of nonferrous metals, this country failed to match its competitors, largely from Western Europe and the developing nations. Suppliers from both increased shipments two and one-half times, substantially boosting their shares. Meanwhile, the U.S. position declined to under 10 percent by 1969. A strike in the U.S. copper industry during much of 1967 and the business slowdown in Europe reduced copper exports that year. By 1969, they still had not regained their 1966 level, although those of nonferrous metals as a whole moved considerably higher, notably bolstered by a sharp rise in aluminum sales.

In contrast, U.S. textiles moved sluggishly, and, as a consequence, this country's share of the $10 billion world textile market outside of the United States dropped to less than 6 percent by 1969. In the meantime, the EEC raised its share to more than two fifths and Japan to over 13 percent.

Adding it up, the deterioration in the U.S. share of the manufactures market since 1962-64 was tantamount to a loss of $2 billion in potential export sales, the bulk of it attributable to declines in the EEC and in South and East Asia. Canada, Africa, and the Western Hemisphere outside of Latin America were among the few areas where the U.S. market position improved but in none of these were the equivalent increases in exports substantial.

DRILLING DEMONSTRATION—*Mission members exhibited their equipment at construction sites in each country—the first time a Commerce specialized mission has demonstrated its products in use. Above, in Caracas, Director Bernard D. Levinson (3rd from left) looks on as Juan Herrera (left), president, Federation of Venezuela Construction Workers, tries out a drilling machine supplied by mission member C. Melvin Spjut (next) of Christensen Diamond Products Co., Salt Lake City.*

Finishing Tool Sales Seen In Three Latin Countries

The market potential for finishing tools and equipment for the construction industry in Colombia, Panama, and Venezuela is excellent, according to reports from trade mission members who recently visited these countries.

"I was surprised to see the amount of construction in all three countries," said Leo Sackett, sales representative of the Goldblatt Tool Co. of Kansas City, Kan., manufacturer of tools and equipment for the trowel trades.

Representatives of six U.S. companies supplying finishing tools and equipment for the construction industry visited Bogota, Panama City, and Caracas for two weeks in November and December under Commerce Department sponsorship.

The finishing tools mission offered a special feature: In each of the places visited, the participants gave demonstrations of their equipment in use. Sites where building construction was in progress were made available for the exhibitions. Actual uses were demonstrated of paint spray equipment of various types, diamond drilling machines, powered rotary hammers, compressors, concrete finishing and spraying equipment, and liquid lifters. One of the participants, Roscoe Greely of Myrmax Specialties, Inc. of Baton Rouge, demonstrated the application of his firm's liquid plastic floors. The demonstrations were viewed by about 300 prospective distributors, dealers, and users.

The objective of five of the participants was to obtain agents or distributors. The sixth sought to select licensees or joint venture

partners. "The leads supplied were excellent," reported Bernard Kitrick, president of Kitrick Management Co. of Cincinnati.

Three of the participants who sought agents or distributors made arrangements with 22 companies. The other two made numerous contacts and have a wide choice in the selection of distributors. These five participants are continuing negotiations with 24 different companies. The participant who sought licensees or joint venture partners has made preliminary arrangements with two companies and has lined up several others. He plans further negotiations when the interested parties come to the United States within the next two months to meet with him.

Half million in sales seen

Although the primary interest of the members was to obtain distributors or licensees, actual sales during the mission were more than $100,000. Prospective sales for 12 months are in excess of half a million dollars.

Paul E. Moss of Valley Stream, Long Island, president of the company that bears his name and a participant in previous trade missions, was seeking distributors for airless spray equipment which he demonstrated. He reported, "We have laid some good groundwork that should produce some worthwhile business."

A. J. LeVasseur of Rockwell Manufacturing Co., Pittsburgh, manufacturer of power tools, noted that there was stiff competition in his line. He added, however, that he had made excellent business contacts, that the market for his type of product was good, and that with sincere effort to increase sales lucrative returns will result.

Aside from immediate results, the mission had other benefits. Said C. Melvin Spjut of Christensen Diamond Products Co. of Salt Lake City, "In addition to locating contacts with business firms in each country, the mission gave me an opportunity for market research and for obtaining information on doing business in each country." Bernard Kitrick, too, commented on the opportunity for market research.

The participants were particularly impressed with the care given to preparation of a mission by the Commerce Department in cooperation with the Embassies. Roscoe Greely, expressing the sentiments of the group, stated: "Before making this trip I had no idea what part Commerce is playing in promoting foreign trade and good will throughout the world. I feel that this is true of many business people."

In summarizing the reports and experiences of the participants, the director of the mission, Bernard D. Levinson, of the Department's Bureau of International Commerce, said, "There is a tremendous amount of construction in progress and in prospect in each of these three countries—particularly high rise residential apartments and office buildings. While U.S. companies have competition from foreign suppliers, there is generally high acceptance of American products. There appears to be great potential for U.S. exporters, but they must make the effort to get into the market or increase their current sales."

To Aid Computer Exports

A one-day Computer Export Expansion Symposium will be held March 2 at the International Club, Washington, D.C., to help small and medium size U.S. firms sell in foreign markets. The Institute of Electrical and Electronic Engineers is staging it in cooperation with the U.S. Department of Commerce. Advance registrations are being made by Commerce's Business Services Field Office, 415 U.S. Customshouse, Gay and Lombard Sts., Baltimore, Md., 21202, telephone 301-962-3560.

Missions To Visit South America, Europe In Spring

Three trade missions, with broadly differing industrial specializations, are being organized to go abroad this spring.

A fisheries mission and a mining equipment mission are to visit Lima, Peru, in April. Both missions are planned to coincide with the twin, TECNOPAN and TECNOMIN trade fairs in Lima April 17-23 (see p. 62 of this issue). The fisheries mission will continue on to Venezuela, where it will be operating until April 29.

The Commerce Department will have a Business Information Center in the TECNOPAN (fisheries) fair building. The Center, to be the base of operations for both missions, will include a section for audio-visual presentation of members' equipment. Arrangements for similar showings by the fisheries mission will be provided in Caracas.

Apparel, textiles display

A mission exhibiting American apparel and textiles, with emphasis on "Young America" styles and designs, is to visit Sweden and Denmark May 22-June 2. Members will stage a between-show exhibition at the U.S. Trade Center in Stockholm, May 24-26. Samples of their product lines will then be handcarried to Copenhagen where a Business Information Center will be established.

Recruitment for each mission is to be completed by March 1. Interested firms are invited to write: Trade Missions Division, BIC-940, U.S. Department of Commerce, Washington, D.C. 20230; or phone Franc Manzolillo or Richard Eisenmann, 202-967-3266 or 2215 for the mining equipment or fisheries missions; Mrs. Wanda Ale, 202-967-3904, for the apparel and textiles mission.

STRONG AUDIENCE INTEREST—*Malaysian businessmen gave full attention during seminar session on effective maintenance techniques conducted by W. K. Van Kirk, Jr. of York International, York Division, Borg-Warner Corp.*

U.S. Seminar Team Finds Market In Southeast Asia

There's a good market for U.S. plant maintenance equipment in Southeast Asia, if the experience of a recent Commerce-sponsored seminar group is any indication of sales prospects in that area.

"The Seminar was most beneficial to the Malaysian participants as well as the U.S. team members, many of whom had never visited the area." This was the verdict of the Commercial Attache at the U.S. Embassy in Kuala Lumpur, Malaysia. A 14-member team of American experts conducted the Plant Engineering and Maintenance sessions there during a three-nation tour of Southeast Asia.

The mission's "team spirit, enthusiasm and ability far exceeded any U.S. group that's ever visited Kuala Lumpur," he added. "Despite the complexity of the subjects covered, the speakers succeeded in getting through to participants, resulting in a highly inspired audience with extensive floor participation at all sessions."

Results in Bangkok, Thailand and Singapore were equally impressive.

In Singapore, attendees buttonholed speakers during the coffee breaks at the Shangri-La Hotel sessions, and enlivened the meetings with their lively participation from the floor.

Embassy Urges U.S. Firms To Join Two Swiss Fairs

The U.S. Embassy in Bern strongly recommends that U.S. firms take part in two trade fairs scheduled for Switzerland during 1972.

A **technical exhibition** in Lausanne from April 19-22 will be held in conjunction with the **Third European Congress of Perinatal Medicine.** The show will attract between 1,600-2,000 physicians specializing in gynaecology, obstetrics, pediatrics and anaesthesiology. Advanced U.S. medical equipment in these fields is thought to have high sales potential in Europe. Contact Dr. H. Bossart, Association Europeene de Medecine Perinatale, Palais de Beaulieu, CH-1002, Lausanne, Switzerland.

The annual **Show for Assemblage, Miniaturization and Automation** (SAMA), will be held Sept. 25-30 in Bern's Allmend Exhibition Center. Approximately 200 U.S. firms took part in the 1971 show, at which 95% of the attendees were trade visitors. For details, write Walter Schmid, SAMA International, Rue Hugi 14, P.O. Box 1052, 2501 Bienne, Switzerland.

Shows In Algeria, Japan Invite U.S. Exhibitors

Two trade fairs in widely separated countries offer U.S. firms access to promising markets for packaging and pollution control equipment.

The Osaka (Japan) International Trade Fair Commission is sponsoring a trade fair, Inter-Engineering '72, from April 18 to May 1. A separate pavilion will be maintained for **pollution control and measuring equipment.** All American producers of such equipment are invited to attend. This biannual exhibition drew a total of 800,000 visitors in 1970 and sold $18 million worth of pollution control equipment.

Interested persons should write to Teruo Ishida, Secretary General, Osaka International Trade Fair Commission, Uchihonmachi, Higashi-ku, Osaka, Japan.

American firms are invited to take part in a **packaging exhibition** to be held in Algiers from May 15-25. U.S. representatives point out that Algeria's rapid industrialization is boosting the market for this equipment, and participation could assure solid entry on the ground floor of an expanding activity.

For details, write: Mohamed Farrah, Director of the National Office for Fairs and Expositions, Algiers International Fair, Exposition Palace, Pins Maritime, Algiers.

Four Trade Center Exhibits To Show Varied U.S. Goods

Metal surface treatment equipment, Japan: The metal surface finishing and treatment equipment and supplies industry in Japan is growing rapidly. Total production of metal surface treatment equipment, including related waste water treatment equipment, was estimated at $126 million in 1970, more than a 50% increase over 1968.

The U.S. Trade Center in Tokyo will give U.S. suppliers of this equipment a custom-made introduction to this growing market at a May 22-27 show. It will be the third show of its kind at the U.S. Trade Center in Tokyo; previous successful shows were held in June 1965 and May 1970. In the 1970 show, exhibitors reported combined off-the-floor and one-year projected sales of more than $1.1 million. Products which sold well at the 1970 show included automatic coating and plating systems, industrial waste-control systems, electronic milling sonic cleaners, and electrostatic spray-coating equipment.

The exhibition has been timed to coincide with the Fifth International Congress on Metallic Corrosion, which will be held in Tokyo and should attract Japan's top buyers in the field.

For more information, or to reserve space, call Robert Levine on 202-967-4705 or write him at BIC-936, U.S. Department of Commerce, Washington, D.C. 20230.

Automotive service equipment: Italy. American manufacturers of automotive service and diagnostic equipment, supplies, and auto accessories will have an excellent opportunity to develop new overseas business by taking part in an exhibition staged by the U.S. Department of Commerce at the U.S. Trade Center in Milan from May 23-27.

The exhibition is aimed at the rapidly growing Italian automotive market. Motor vehicle registration in Italy reached 11.2 million units in 1970.

Like the Italian motor vehicle industry, the local industrial sector producing the common types of maintenance and servicing equipment is quite competitive and fairly well developed. However, there is a good potential market in Italy for such American-made lines as diagnostic and test equipment, engine and brake test benches, wheel balancing and aligning equipment, light aligning equipment, and other products which are either new to this market or include novel technical features.

For more information, call Gus Duda at 202-967-2434, or write him at BIC-948, U.S. Department of Commerce, Washington, D.C. 20230

Industrial process controls: Scandinavia. An exhibition featuring industrial process controls and on-line computers, designed to help American manufacturers and exporters develop and expand their sales in the Nordic market, will be sponsored by the U.S. Department of Commerce at the U.S. Trade Center for Scandinavia, June 5-10.

As a highly industrialized region, Scandinavia continues to undergo expansion and diversification of its processing industries. Rising costs and a prevailing labor shortage are forcing plants to automate in order to remain competitive. Manufacturing firms are consolidating their facilities to achieve greater efficiency. Such factors are creating a growing demand for industrial process instruments; control, regulator, and solenoid valves; and related process control computers.

Investment in new control equipment in 1971 is expected to reach $45 million in Sweden alone. About two-thirds of total Swedish process control consumption is accounted for by imports.

Recent market surveys conducted for the U.S. Department of Commerce have revealed several products with strong sales prospects in Scandinavia. For information, contact Lee Swift at 202-967-4461 or write: BIC-946, U.S. Department of Commerce, Washington, D.C. 20230.

Passive and electromechanical electronic components: Germany. U.S. manufacturers and suppliers of this equipment will be able to exhibit and sell precision parts at a June 12-16 show at the U.S. Trade Center in Frankfurt.

West Germany has the largest and fastest growing electronics industry in Europe. West German production of electronic components increased by 80% in value from 1966 to 1970 while *imports quadrupled* and exports were up one and one-quarter.

The passive and electromechanical component sector of the market, including resistors, capacitors, inductances, crystals, filters, relays, switches, and connectors, is sharing this rapid growth. Production was up 70% from 1968 to 1970, imports increased by over 130%, and exports more than doubled.

Modernization and expansion of the telephone system, development of the Bundespost data transmission network, continuing industrial automation, increasing investment in R and D, intensified law enforcement of pollution control and traffic regulations, and the increasing share of electronics in consumer goods can be expected to ensure an expanding electronics and electronic component market.

For more information, or to reserve exhibit space, call Jack Crown at 202-967-4421, or write: BIC-946, U.S. Department of Commerce, Washington, D.C. 20230.

Worldwide Business Outlook

Japan Sees End To Slump, Poises For Strong Upturn

The Japanese economy is poised for a strong expansion after the current slowdown bottoms out during the first quarter of 1972.

Dominant force

Since mid-1971, the economy has been in the down phase of a medium-term investment cycle, featuring a sharp decline in new private plant and equipment investment, mainly in manufacturing. This cycle is the dominant force presently at work in the economy. It probably neared bottom toward the end of 1971, but based on the experience of previous investment cycles in Japan the recovery of manufacturing investment will be gradual.

Although many sectors of the economy have continued the strong expansion that began six years ago, the cumulative effect of the plant and equipment investment slowdown has reduced the overall economic growth rate to about 4 percent, in real terms, for 1971.

Residential construction and retail sales remain buoyant, and the overall tone of the economy remains firm. Recent governmental fiscal measures, designed to stimulate economic activity, should produce positive and timely results.

The expansionary fiscal policy initiated in the fiscal 71 supplemental budget, plus the even larger outlays envisioned in next year's budget, should sustain overall demand at a level sufficient to produce an economic growth rate of from 8 to 9 percent in real terms for Japanese fiscal 1972 (April 1972 to March 1973). The upswing should take hold in the second quarter of 1972, reports the U.S. Embassy in Tokyo, but a resumption of the extremely high growth rates of the 1966-70 period is very unlikely since manufacturing investment will respond very slowly.

The slowdown already has contributed to a large increase in Japan's trade surplus, mainly owing to slack in the growth of imports rather than an increase in export growth. This trend is likely to continue, and Japan's balance of payments position will remain strong despite international developments and the recent 16.88 percent yen revaluation.

Reaction to U.S. acts

The recent U.S. economic measures have adversely affected confidence in Japan, and according to some views this has added some impetus to the investment slowdown that was already under way. However, the shock is expected to be transitory in nature with little direct or lingering effects on the Japanese economy.

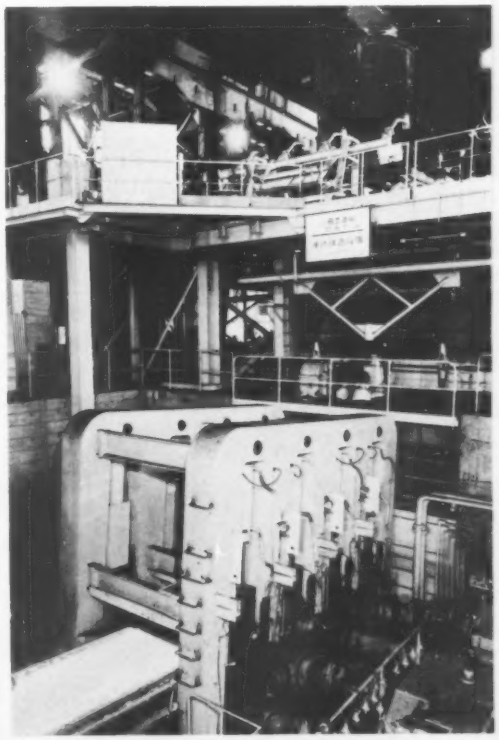
Preliminary figures indicate that through November of last year U.S. exports to Japan declined by 13.5 percent over the same period of 1970, while U.S. imports from Japan rose by about 19.8 percent. These figures reflect the slow growth of Japan's imports caused by the domestic slowdown.

No doubt, this trend will continue at least through the first half of 1972. By the second half of this year, however, a rise in the level of such U.S. exports to Japan as coal, scrap and nonferrous metals should become apparent.

Sales of U.S. agricultural commodities to Japan last year probably fell about $100 million below the record $1.2 billion level achieved in 1970, partly owing to lower prices and shipping strikes.

Sales of some capital goods, including aircraft and nuclear power, probably will continue to rise, but other capital goods will continue to be generally adversely affected by the drop in plant and equipment investment in Japan. On the other hand, the new yen-dollar exchange rate should enhance the competitiveness of U.S. goods in the Japanese market.

The sharp drop in manufacturing investment last year has been accompanied by a relative increase in private investment in the nonmanufacturing sector. There are signs of a much more diversified private investment pattern developing, featuring increased investment in distribution, various service-type industries, housing, and recreational industries. Combined with rapidly rising levels of personal income, this shift may open new opportunities for U.S. exporters active in non-manufacturing and service industries of all kinds.



JAPAN IS READY—*Industry is prepared for the upswing predicted for 1972. Here, a continuous casting unit at Nippon Kokan's Keihin Works near Tokyo.*

Buoyant Economy, Fast Growth Make Ivory Coast An Important U.S. Market

The Ivory Coast is still booming.

As industrialization increases, and the Ivorian economy continues to shift away from its former dominance by agriculture, the market for high-technology imports is increasing. American exporters should be able to capture a greater share of this growing market, reports Economic-Commercial Officer John V. Brennan from the U.S. Embassy in Abidjan, helping to reduce the sizable U.S. trade deficit with Ivory Coast.

Confidence is high

The population of Ivory Coast is estimated at nearly 5.3 million, with over half a million concentrated in Abidjan, which is growing at the rate of about 50,000 per year. Gross domestic product exceeded $1.6 billion in 1971, an annual growth rate of about 12 percent in current prices. The Ivorian Government favors private enterprise and foreign investment and business confidence remains high.

Total imports in 1970 amounted to $388 million, of which $31 million (8 percent) came from the United States. Total exports were $469 million; the United States bought goods worth $87 million, $63 million of which was accounted for by coffee. The American trade deficit with Ivory Coast reached $56 million in 1970, up from $33 million in 1969.

Sales of American-made heavy construction and earthmoving equipment have increased substantially, and should continue to improve. Long-term prospects for this type of equipment are very good. Work on the $100 million Bandama dam is virtually complete, except for the installation of electrical-generating equipment, and construction of another large dam is under consideration. Agricultural plantations, highways and other construction, both under way and contemplated in the 1971-1975 Development Plan, will also require large amounts of heavy equipment.

Construction near Abidjan of the first phase of the so-called African-Riviera—300 medium-income housing units—is well under way, with the units scheduled to be ready for occupancy in July. An 18-hole golf course has been started, and planning is under way for a 500-room tourist-class hotel. Other facilities to be built include extensive tourist accommodations, housing for all income groups, light industry, and a center for international commerce.

Considerable progress

Considerable progress is being made in the development of tourist facilities. An addition to the Intercontinental-managed Hotel Ivoire, already the largest in Africa, is slated to open in late 1972, as is that hotel's 2,000-seat convention center. A new hotel, the first in many years, is being built in downtown Abidjan less than a block from the American Embassy. The 600-bed Club Mediterranee facility, located on the coast at Assini about 50 miles east of Abidjan, received its first European tourists last month.

Opportunities for the sale of American goods such as airconditioning equipment, refrigeration and kitchen equipment, lighting fixtures, builders' hardware, etc., will expand as the African Riviera progresses and as other tourist facilities are built.

A U.S. firm, Pickands Mather Intercontinental, is presently arranging financing for a proposed $400-500 million investment in iron ore mining and pelletizing in the western part of Ivory Coast. The market for mining and materials handling equipment will greatly increase if this operation gets under way.

The new port of San Pedro came into operation during 1971. This port is intended to serve the southwestern part of the country, which the Government intends to develop agriculturally and by the development of wood-processing industries, including a paper pulp plant. As the Ivory Coast continues to develop forest resources and processes more wood, U.S. suppliers of

ABIDJAN PORT—*The United States has been buying more than double what it sells to the Ivory Coast, but U.S. exporters have a good opportunity to cut the deficit.*

lumber and sawmill equipment should be able to increase sales.

The Government plans to continue to expand the agricultural diversification program begun in 1965. Projects mentioned in the 1971-1975 Development Plan include increased production of rice, cotton, palm oil, coconuts, rubber, and pineapple. A sugar plantation and refinery located in the northern part of the country will, it is hoped, make Ivory Coast self-sufficient in that commodity by 1975. Prospects for increased sales of American agricultural and food processing equipment look bright.

The new Plan calls for a shift in emphasis of industrialization from import-substitution to development of export-oriented industries. The objective for industrial growth during the 1971-1975 period is 18 percent a year, and the Government envisions that by 1975 industrial production will total nearly 20 percent of GDP.

Planned projects

Projects included under the Plan include a large textile mill near Dimbokro, construction of which is already under way, the previously mentioned paper pulp plant and sugar refinery, a tire factory, synthetic fabric mills, assembly of electronics components, and manufacture of various industrial products. Opportunities for the sale of American capital goods exist in all these areas.

Although Union Carbide's battery factory remains the only completely American-owned manufacturing plant in Ivory Coast, U.S. firms own significant portions of the commercial banking, petroleum distribution and textile manufacturing sectors. Other U.S. firms have indicated an interest in investing, generally in joint venture with Ivorian or third-country interests. ESSO Exploration will soon drill for off-shore oil, and a major discovery would, of course, lead to increased American investment.

IVORIAN SHOPPERS AT A PAC STORE—*The Government aims to have 800 of these stores around the country; about 80 are already doing business in Abidjan.*

New Ivorian Store Chain Holds Promise For U.S. Retailers, Suppliers

The Ivorian Government is sponsoring a chain of retail stores in Ivory Coast. The U.S. Embassy in Abidjan reports that the government's aim is not to create a state retail sector but to develop a class of independent African businessmen aided initially by the state. These businessmen would become the owners of the firms after reimbursing the state loans.

Known as the Programme d'Action Commerciale (PAC), the chain already has 80 stores in Abidjan and 10 in Bouake, the second largest city. Stores are being opened in regional centers, and it is hoped that in five years PAC will have 800 outlets serving the country's population of over five million.

The stores, which range from 450-1,350 square feet, reportedly present an attractive and modern appearance. Each stocks a standard inventory of about 800 items. All stores have refrigeration facilities. Almost all goods are sold at the same prices in the countryside and Abidjan.

PAC is a voluntary organization of independent, operator-owned stores. The Government makes credit, repayable in five years, available to prospective members. Those affiliated with the chain benefit not only from the mass purchasing power of PAC, but also have access to its technical advice and supervision. PAC also assists with accounting and inventory control.

As there are relatively few trained Ivorian entrepreneurs, the Government created a School of Commerce and Management in 1970. After five months training, graduates of this free school open their own PAC stores, or are employed by PAC in wholesaling or administration.

In Ivory Coast, as in a number of other West African countries, retail trade has long been dominated by foreigners. The Ivorian Government estimates that only 16 percent of food retailers in Abidjan are citizens, and that in rural areas the share is only 5 percent at best.

The Ivorian Government places a great deal of importance on PAC, believing that the chain could benefit from the experience and techniques of U.S. retailers. The Government would entertain proposals from interested parties, and would also like to hear from prospective American suppliers, in French.

Write: Ministry of Economy and Finance, B.P. 1890, Abidjan, Ivory Coast.

East Pakistan: Uncertainties, Prospects For Economy And Foreign Trade

Following nine months of civil strife and a two-week conflict involving Pakistan and Indian forces, authorities in the east wing of Pakistan announced in December 1971 the formation of a new state called Bangladesh with its capital in Dacca. Several recent pronouncements have stressed the socialist and neutralist policies expected to be followed by the authorities. However, the political and economic situation in the area is still unclear as the leaders face difficult tasks of restoring order, rehabilitating the economy, and resettling returning refugees.

Factual information

It is hoped that the factual information presented below will be useful to American firms in assessing their future business interests.

East Pakistan consists almost entirely of an alluvial plain formed by the many branches and tributaries of the Ganges and Brahmaputra rivers. It is bounded on the north, east, and west by India, on the southeast by Burma, and on the south by the Bay of Bengal.

The area has a tropical monsoon climate with annual rainfall of about 85 inches and temperatures averaging 84 degrees. Floods and cyclones regularly damage agriculture in the delta region.

With a population of approximately 75 million and only 55,126 square miles of land, East Pakistan is one of the most densely populated areas in the world (over 1,300 persons per square mile).

Economic growth has barely exceeded population growth (3 percent per annum) in recent years. The gross national product (GNP) of approximately $5 to $6 billion in FY 1971 amounts to only about $70 to $80 per capita. The economy's low level of monetization is reflected in underdeveloped financial institutions and subsistence-oriented agriculture.

Agriculture generates over 60 percent of GNP and over 90 percent of total exports. Jute is the major cash crop, followed by tea and sugarcane. About 85 percent of cultivated acreage is devoted to rice. However, the area suffers a chronic food production deficit necessitating substantial yearly imports of at least 10 percent of foodgrain and vegetable oil requirements. Among the first priorities of the new leaders will be increasing food production and obtaining relief from abroad.

The manufacturing sector accounts for less than 10 percent of GNP. Jute textiles is the most important industry, accounting for over 30 percent of the value of industrial output, followed by cotton textiles which contributes about 10 percent. There is limited production of sugar, paper, steel, machine tools, fertilizer, fuel oil and cement.

Economic infrastructure is in the first stages of development. Some basic facilities such as bridges, railroads, and ports sustained considerable damage during recent hostilities. The primary means of transport is still the vast inland waterway system. Chittagong is the major seaport; berthing space and limited offshore port facilities are located at Chalna.

Inadequate fuel and electric power has been a significant bottleneck in industrial development. Additionally, mineral resources are limited to small deposits of limestone, clay, and silica sand, except for unexploited deep-lying coal and substantial natural gas reserves.

As a producer primarily of agricultural goods, East Pakistan will continue to depend largely on trading these products to secure needed industrial machinery and raw materials. However, the levels of exports and, to a lesser extent, imports have fallen precipitously as a result of the recent hostilities, and substantially changed trading patterns may emerge. Already, for example, trade which was previously banned with India has begun. Foreign aid and commercial financing availabilities are likely to be the key factors influencing the source of procurement. Government emphasis on state trading, barter arrangements, and restrictive trade controls can also be expected.

In FY 1971, total imports amounted to $331 million (converted at the rate of Pakistan Rupees 4.76=$1 US) compared to $381 million the previous year. Principal imports have been machinery and transport equipment, wheat, chemicals, oils and fats, rice, iron and steel, and petroleum. Major suppliers and their share of the 1971 market were: United States, 32 percent; Japan, 12 percent; United Kingdom, 9 percent; and W. Germany, 7 percent.

FY 1971 exports totaled $263 million compared to $349 million the previous year. Raw and manufactured jute comprise the bulk of foreign sales. Other export items are leather, textile yarn and thread, fish, and cotton fabrics. The major markets in 1971 were the United States (20 percent of sales) followed by the United Kingdom (10 percent), Taiwan (6 percent), and W. Germany (4 percent).

U.S. business

East Pakistan's imports from the United States, which dropped to $105 million in FY 1971 from $123 million the previous year, have been largely financed under the PL-480 and AID programs. Some U.S. sales have been effected under the international bidding procedures of World Bank and Asian Development Bank loans.

Prior to the hostilities which began in March 1971, numerous projects in the areas of irrigation and water control, railroads, power transmission, telecommunications, and fisheries development, pro-

vided sizable opportunities for Western suppliers. While immediate needs are for foodgrains and other relief aid supplies, East Pakistan's substantial reconstruction and economic development requirements should warrant the close scrutiny of U.S. exporters.

The outlook for private foreign investment appears uncertain. American direct private investment is estimated at about $10 to $15 million, and includes petroleum distribution and marketing, pharmaceutical, jute bagging, banking, insurance, and engineering-consultant operations. The bulk of private foreign investment in the area is British, principally in tea estates, river transport, tobacco, and petroleum.

As of this writing, persons who wish to visit the area may contact Bangladesh authorities in Calcutta, India, in order to obtain entry permits. Flights from Calcutta to Dacca are by Indian Airlines and schedules are irregular.

Italian Cities Crack Down On Industrial Polluters

Local authorities in major Italian cities such as Rome and Milan are taking legal action against industrial firms polluting the water and air.

Although the Italian nation still lacks specific overall anti-pollution legislation, particularly where water is concerned, local authorities have acted under two existing laws which require the treatment of all public and industrial sewage before it is released in rivers or the sea, and prohibit the endangering of public health. Recent actions in Milan under these laws resulted in the sentencing of one plant owner who had been previously warned by authorities. At the same time 500 owners and plant managers of 430 firms in the Milan area were warned by the local district attorney that their plants were discharging toxic wastes into waters destined for human consumption and that they might be subject to criminal prosecution. Many of these firms have reportedly been fined up to $1,000 each (600,000 lire).

The Italian Government's Ministry of Budget and Planning recently released a preliminary version of the next Five-Year Plan (1971-75), which contains a section on the environment. The document estimates that about $3.5 to $4.8 billion will be needed over the next five years to restore the Italian environment to an acceptable level; special attention will have to be accorded to the southern Mezzogiorno region because of its still largely non-industrial character and because of its touristic value. At present it is contemplated that the polluter will generally pay for abatement; most cities will therefore have to appropriate budgetary resources to cope with pollution. For industrial plants, however, the program visualizes a system of low interest loans as an incentive to comply promptly with anti-pollution measures.

Late awakening

Italian public opinion has awakened rather late to the importance of ecology and pollution, and the press has done an excellent service in drawing attention to all aspects of the problem. The first major trade fair in Italy featuring pollution control systems and equipment —Antiquinamento 71—was held in November at the Milan Fair grounds, and was so successful that it will be repeated next November. The U.S. Department of Commerce plans to stage a concurrent show on pollution control and water resources equipment at its Trade Center in Milan.

New Portuguese Unit To Assist Foreign Investors

Under the terms of a recently enacted law the Portuguese Government has established an Investment Advisory Service, the primary task of which will be to assist domestic and foreign firms interested in investing in Portugal.

The Service, which will operate under the Secretary of State for Industry, will have the following principal functions: provide foreign and domestic firms information on industrial investment opportunities in Portugal and orient potential investors toward the most suitable industrial sectors and geographic regions.

The Portuguese Government follows a liberal policy toward foreign investment and offers a wide range of incentives, including tax exemptions or reductions and elimination or reduction of import duties on equipment and raw materials not available locally.

While some matters are decided on a case-by-case basis, applications for investment generally are welcome as long as the project utilizes, to the extent possible, Portuguese materials, equipment, and labor; introduces modern technology; involves the importation of capital; and contributes to the balance of payments.

One of the tasks of the new Investment Advisory Service is to establish specific opportunities for investment. On a broader basis, however, the government grants priority to investment in chemical and metallurgical industries based on mineral resources and industries based on agricultural products or on easily trainable manpower.

For further information, write: Servico de Apoio ao Investidor, Secretaria de Estado da Industria, Ministerio de Economia, Praca do Comercio, Lisbon.

World Trade Actions

Mexico Cuts 1,200 Tariffs; Other Trade Moves Listed

Mexico: Effective Jan. 1, the Mexican Government reduced the import charges applicable to some 1200 classifications in chapters 84 and 85 of the import tariff dealing with machinery and electrical equipment. On most such imports, the specific duties have been eliminated. In addition, the ad valorem duties on many machines have been reduced from 30, 25 or 24 to 20, 15 or 10 percent, and on a few items rates low as 5 and 3 percent have been established. The official valuation on which these ad valorem rates are based was set at a uniform five pesos per kilogram, or about 19 cents a pound.

The import duty changes were published in the *Diario Oficial* of Dec. 27, 1971.

New Zealand: The Government has announced a major relaxation of import licensing controls on completely knocked-down (ckd) automobiles for assembly in New Zealand. Import licenses will be issued to automobile assembly companies on the basis of their sales; for each new car sold, a license will be issued to bring in another. Imports of built-up cars, however, will continue to be severely restricted.

The assembly companies are already operating at near capacity, so the effects of the new system will not be felt until they can expand their facilities. New car imports should increase substantially, easing the current shortage, and consumer preference will change the market shares which have been frozen by the old licensing system that required approval of each license on an individual basis. General Motors and Ford, along with the two large New Zealand firms which assemble Chrysler, Rootes Group, Austin, and Morris cars, are expected to benefit most from this action. The eventual phasing out of the British preferential tariff will also help create a more competitive market.

Mozambique: The Provincial Secretary of Public Works has announced the implementation of phase one of the 1971-79 Mozambique Road Plan, which will result in 6,210 miles of new road construction at a cost of $368 million. Contractors interested in bidding on the $38 million first phase must submit their pre-qualification registration before Dec. 31. The local government is seeking bids from foreign firms, and will require that the foreign firms raise 40 percent of the value of the contract from external credit sources, to be repaid by the government on a deferred basis as the roads come into use.

Greece: The Ministry of National Economy has revised and codified regulations governing the importation of List "B" commodities (i.e. machinery and mechanical equipment considered to be manufactured in Greece) which are still subject to the preimport approval requirement. Machinery and mechanical equipment in general included in List "B" is now identified by tariff paragraph to eliminate any possible misunderstanding in determining the equipment involved in each case. The new decision has also introduced a new system which simplifies the issuance of import licenses for List "B" machinery by eliminating certain formalities which slowed down the screening, processing, and implementation of import applications.

South Africa: The South African Government has published Import Control Notices No. R2159 and R2160 of Nov. 25, announcing a 50% reduction from that date in outstanding 1971 import licenses and regulating the issuance of new import licenses for 1972. Included in the changes for 1972 is a sharp reduction in the list of commodities which may be imported without a license, i.e., the free list. Only 57 tariff headings and subheadings, primarily petroleum products, books, wool, and medical and scientific instruments, remain on the list, as compared to 261 in 1971. In addition the issuance of import licenses for 1972 has been delayed until March 1 instead of the usual Jan. 1 issue date. Licenses for importation of raw materials, capital goods, agricultural machinery and motor vehicles will be made available as needed to maintain economic activity but licenses for most other goods, particularly consumer goods, will not be allocated until the March 1 date. Further information regarding the South African action, as well as copies of the Import Control Notices implementing the actions, is available on request from the Africa Division, BIC-884, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2436).

Tanzania: The Government of Tanzania announced on Nov. 8 that thereafter no passenger automobiles could be imported into Tanzania without a prior license issued by a special government committee. This ruling applies to both private purchasers and automobile dealers. Large trucks, ambulances, and large buses, as well as motorcycles are exempt from the ban, but small trucks, pickups, and micro-buses are affected. Automobiles shipped before Nov. 8 and arriving in Tanzania before Feb. 9, and other vehicles shipped before Nov. 8 and arriving before May 9 are exempt from the restriction. The action is

intended to limit the importation of private vehicles by citizens of Tanzania. Vehicles destined for diplomatic personnel, for use by technical or economic assistance missions, or other approved users are not affected by the ruling. For additional details, contact the Africa Division, BIC-884, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2436).

United Kingdom: The 1972 import quota for cigars from the Dollar Area, excluding Cuba, has been set at the same level as 1971, £50,000 c.i.f. (£=$2.61), of which not more than £30,000 c.i.f. will be available for hand-made cigars.

The Dollar Area comprises Bolivia, Canada, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Liberia, Mexico, Nicaragua, Panama, Philippines, United States, and Venezuela.

Uruguay: In order to further discourage imports, tariff surcharges of 50% and above have been raised to 300% except for LAFTA trade. Imports subject to surcharges lower than 50% or exempt from surcharges must be made at an effective rate of 370 pesos per dollar (except for crude oil). At the same time prior deposit rates of 105% and 150% have been raised to 315% and 450%, respectively.

Imports considered in excess of importers' needs and therefore speculative must pay special surcharges. New enforcement power over import and export regulations has been given to the Bureau of Foreign Trade. The ban on capital-goods imports, in effect since May, has been prolonged until March 31.

Also in Uruguay, the critical balance of payments situation caused the outgoing government to issue Decree 884/971, suspending imports that have a surcharge of 50% or higher for the period Dec. 28, 1971-March 31, 1972. Items subject to this embargo are those considered nonessential or competitive to national production. The embargo will not apply to: a) imports shipped prior to Dec. 28, b) temporary admission or those without foreign exchange cover, c) imports of raw materials and other goods deemed essential to national industry, and d) imports covered by international agreements.

Pakistan: The July-December 1971 import policy will remain in effect until further notice. Highlights of this policy were carried in the Sept. 20, 1971 issue of this magazine.

U.S., USSR Study Business Links

A delegation representing the USSR Ministry of Foreign Trade on Jan. 18 completed a series of meetings in Washington with officials of the U.S. Department of Commerce exploring possibilities for increased trade and greater encouragement of U.S. business participation in major industrial projects within the Soviet Union.

The Soviet delegation was led by A. N. Manzhulo, Deputy Minister of Foreign Trade. The U.S. delegation was headed by Harold B. Scott, Assistant Secretary of Commerce for Domestic and International Business and included observers from the White House staff and the Department of State. Robert P. Beshar, Deputy Assistant Secretary of Commerce and Director of the Bureau of International Commerce, chaired the formal meetings for the U.S.

The timing, place and agenda for these talks were agreed to in Moscow between Secretary of Commerce Maurice H. Stans, Chairman A. N. Kosygin, and Soviet Minister of Foreign Trade N. S. Patolichev, during Secretary Stans' visit to the USSR last November (See *Commerce Today*, Jan. 10, pp. 9-13).

The Washington talks dealt principally with identification of Soviet commodities salable in the United States, U.S. products which could be sold in the Soviet Union, procedures for market research and marketing in both countries, methods for facilitating the commercial transfer of technology between the two countries, the need for increased commercial representation in each direction, and the opportunities for participation by U.S. firms in major development projects in the USSR.

Both delegations reaffirmed their desire for increased trade and industrial relations but recognized that there are substantial deterrents which restrain achievement of the full potential for U.S.-USSR commercial relationships. There was recognition that commerce between the two countries would benefit from further improvement in the political climate.

Accordingly, the talks emphasized long-term trade possibilities which would contribute significantly to the domestic economy of each country. They concluded that progress toward mutual objectives could be assisted by broadening contact between Soviet industrial and trading entities and U.S. companies operating within the framework of normal commercial relationships. Simultaneously it would be desirable for both governments to continue conversations seeking an increase in trade.

Made other stops

To this end, the United States is preparing for a visit later by Minister of Foreign Trade Patolichev in response to an invitation which Secretary Stans extended in Moscow.

Through the cooperation of Carl A. Gerstacker, Chairman of the National Export Expansion Council, the Soviet delegation met in New York with leaders of major U.S. business to discuss matters of mutual interest. The Soviet group also traveled to New Mexico and Texas to visit industrial installations, and to New Orleans.

Over 80 Nations In Wide Currency Rate Overhaul

More than 80 nations have now taken action in overhauling currency rates. This wide realignment should benefit U.S. exports and temper imports. It was accompanied in most cases by a return to fixed rates, and abandonment of the float of rates against the dollar.

The fixed rate system had become inoperative when major industrial countries lanuched the float, following U.S. suspension on Aug. 15 of dollar convertibility. With subsequent U.S. agreement to prepare a rise in gold price from $35 to $38 an ounce, and to eliminate the 10 percent temporary import surcharge and "buy-American" provisions of the job development tax credit, most countries resumed maintaining their rate to the dollar around a fixed norm, and the float was discontinued.

Margin widened

The new fixed rates were generally upvalued against the dollar, as a means to help correct the U.S. trade and payments imbalance. Moreover, the possible margin on either side of rates was widened from 1 percent to 2¼ percent—also to facilitate adjustments of imbalance, and to reduce disruptive short-term capital transfers.

The realignment and stabilization of rates began with agreements reached among the U.S. and others of the Group of Ten (the major free world trading nations) on Dec. 17 and 18 in Washington. The Group's initiative on rates was quickly and widely followed.

The accompanying table shows present de facto currency rates, and percent changes since May 1, 1971, preceding the float of rates. The appreciation in principal currencies occurred mainly during the float period. For currencies the float had covered, present rates

Worldwide Exchange Rates

Country of issue	De facto rate, per unit of foreign currency [1] U.S. $	Change from May 1, 1971 Percent	Limit of fluctuation around de facto rate Percent
Afghanistan (no information as yet received)			
Algeria	$0.219909	+ 8.6	*
Argentina [2]	0.200	—17.6	*
Australia	1.2160	+ 8.6	2¼
Austria	0.429185	+11.6	2¼
Bahamas	1.03093	+ 3.1	*
Barbados	0.542857	+ 8.6	*
Belgium	0.0223135	+11.6	2¼
Bolivia	0.0841751	0	*
Botswana	1.3333	— 4.8	*
Brazil [2]	0.1820	— 5.4	*
Burma	0.186961	—11.0	2¼
Burundi	0.0114286	0	2¼
Cambodia [2]	0.008333	+16.7	*
Cameroon	0.0039094	+ 8.6	*
Canada [4]			
Cent. Afr. Rep.	0.0039094	+ 8.6	*
Ceylon	0.168	0.0	*
Chad (no information as yet received)			
Chile (In December 1971, adopted complex system of multiple rates)			
Colombia (no information as yet received)			
Congo, Peo. Rep.	0.0039094	+ 8.6	*
Costa Rica [2]	0.150715	0	*
Cyprus	2.60571	+ 8.6	2¼
Dahomey	0.0039094	+ 8.6	*
Denmark	0.143266	+ 7.5	2¼
Dominican Rep.	1.00	0	*
Ecuador	0.040	0	*
Egypt	2.300	0	*
El Salvador	0.400	0	*
Eq. Guinea	0.0155102	+ 8.6	*
Ethiopia	0.434285	+ 8.6	2¼
Fiji	1.2420	+ 8.6	*
Finland	0.243902	+ 2.4	2¼
France	0.195477	+ 8.6	2¼
Gabon	0.0039094	+ 8.6	*
Gambia	0.521143	+ 8.6	*
Germany	0.310318	+13.6	2¼
Ghana	0.550	—43.9	2¼
Greece	0.0333	0	2¼
Guatemala	1.00	0	*
Guinea	0.0043989	+ 8.6	*
Guyana	0.500	0	2¼
Haiti	0.200	0	*
Honduras	0.500	0	*
Hong Kong	0.179143	+ 8.6	*
Hungary	0.036232	+ 8.6	[3]
Iceland	0.0113636	0	*
India	0.137376	+ 3.0	2¼
Indonesia	0.0024096	— 8.9	*
Iran	0.0132013	0	*
Iraq	3.040	+ 8.6	2¼
Ireland	2.60571	+ 8.6	2¼
Israel	0.238095	—16.7	2¼
Italy	0.00171969	+ 7.5	2¼
Ivory Coast	0.0039094	+ 8.6	*
Jamaica	1.30286	+ 8.6	2¼
Japan	0.00324675	+16.9	2¼
Jordan	2.800	0	2¼
Kenya	0.140	0	2¼
Korea	0.0026	—13.4	*
Kuwait	3.040	+ 8.6	*
Laos	0.0041667	0	*
Lebanon [4]			
Lesotho	1.333	— 4.8	*
Liberia (U.S. dollar serves as internal currency)			
Libyan Arab Rep.	3.040	+ 8.6	2¼
Luxembourg	0.0223135	+11.6	2¼
Malagasy Rep.	0.0039094	+ 8.6	*
Malawi	1.30286	+ 8.6	*
Malaysia	0.354666	+ 8.6	*
Mali	0.0018044	+ 8.6	*
Malta	2.67086	+11.3	2¼
Mauritania	0.0039094	+ 8.6	*
Mauritius	0.195429	+ 8.6	2¼
Mexico	0.080	0	*
Morocco	0.214547	+ 8.6	2¼
Nepal	0.0987654	0	*
Netherlands	0.308195	+11.6	2¼
Neth. Antilles	0.558659	+ 5.4	2¼
New Zealand	1.2160	+ 8.6	2¼
Nicaragua	0.142857	0	*
Niger	0.0039094	+ 8.6	*
Nigeria	3.040	+ 8.6	2¼
Norway	0.150480	+ 7.5	2¼
Pakistan	0.2100	0	*
Panama	1.00	0	*
Paraguay	0.0079365	0	*
Peru [2]	0.258397	0	*
Philippines [4]			
Poland	0.452899	+ 8.7	[3]
Portugal	0.0366972	+ 5.5	2¼
Rwanda	0.010857	+ 8.6	2¼
Saudi Arabia	0.241269	+ 8.6	*
Senegal	0.0039094	+ 8.6	*
Sierra Leone	1.30286	+ 8.6	*
Singapore	0.354666	+ 8.6	2¼
Somalia	0.14440	+ 3.1	2¼
South Africa	1.3333	— 4.8	*
Spain	0.0155102	+ 8.6	2¼
Sudan [2]	2.87156	0	*
Surinam	0.559047	+ 5.4	2¼
Swaziland	1.3333	— 4.8	*
Sweden	0.207775	+ 7.5	2¼
Switzerland	0.259740	+13.5	[3]
Syria [2]	0.26246	0	*
Taiwan	0.0250	0	*
Tanzania	0.1400	0	2¼
Thailand	0.0480769	0	*
Togo	0.0039094	+ 8.6	*
Trinidad, Tobago	0.542857	+ 8.6	2¼
Tunisia	2.06803	+ 8.6	2¼
Turkey	0.0714286	+ 7.1	2¼
Uganda	0.1400	0	2¼
United Kingdom	2.60571	+ 8.6	2¼
Upper Volta	0.0039094	+ 8.6	*
Uruguay	0.0040	0	*
USSR	1.20	+ 8.1	[3]
Venezuela [2]	0.22779	+ 2.3	*
Vietnam [2]	0.00847457	0	*
Yemen Arab Rep. [4]			
Yemen, Peo. Rep.	2.60571	+ 8.6	2¼
Yugoslavia	0.0588235	—11.8	2¼
Zaire	2.000	0	2¼
Zambia	1.400	0	2¼

* Members continue in general to observe the 1 percent margin when they do not elect the 2¼ percent margin. However, they may be indirectly observing the 2¼ percent margin, if they use the currencies of members with this margin, including the U.K. and France, as their intervention currencies.

[1] Reciprocal of figures in this column is the number of units of foreign currency per $1.

[2] Rate applies to limited types of transactions, including—and, in some cases, confined to—imports, or essential imports.

[3] Non-member of the International Monetary Fund.

[4] Does not at present maintain rate around a fixed reference point.

thus differ little from the ones they superseded.

The listed exchange rates for individual currencies in terms of dollars (or cents) are the current de facto rates around which market rates may vary within specified margins. Under past rules of the International Monetary Fund, margins permitted members were plus or minus 1 percent. Under revised rules, they can be plus or minus 2¼ percent, at the option of members, many of whom have decided to exercise it.

The effects that realigned rates are expected to have on U.S. merchandise trade with specific countries and regions will be analyzed for *Commerce Today* readers in an upcoming issue.

Canada Studies Computer Tariffs

Canada: The Minister of Finance has directed the Canadian Tariff Board to make a study of the provisions of the Customs Tariff regarding data processing and related telecommunications equipment. This directive was prompted by representations concerning the effect of the Customs Tariff on the production and use of computers and related telecommunications equipment in Canada.

One suggestion which has been made is that a consolidated tariff schedule for data processing and related telecommunications equipment would encourage the development and growth of production facilities for this equipment in Canada. It has also been alleged that the duty on such equipment, especially that which is not available in Canada, is having an adverse effect on the ability of the Canadian business community to take advantage of computer services and techniques and discourages the processing of data in Canada.

The Canadian tariff numbers of items to be reviewed are: 41202-1, 41400-1, 41405-1, 41415-1, 41420-1, 41425-1, 41430-1, 41435-1, 42700-1, 44506-1, 44508-1, 44524-1, 44532-1, 44533-1, 44538-1, 44539-1, 44546-1, 46200-1, 46241-1. The Board will also include in its study any other tariff items which it feels are relevant.

Proposals concerning the rates of duty and wording of the pertinent tariff items or any newly proposed tariff items should be filed in writing with The Secretary of The Tariff Board, Ottawa, Ontario K1A OG7 Canada, not later than Feb. 25. Briefs or submission in support or opposition to any proposals made by others should be filed in writing with the Secretary not later than April 14. Two hundred copies of proposals, briefs or submissions should be filed.

A public hearing will be held in the Board's courtroom at 219 Argyle Ave., Ottawa, commencing at 10 a.m. May 29. Persons planning to attend should notify the Secretary not later than May 19.

Those who want further information, but who are not on the Board's mailing list, should request the Secretary to put their names on such list for Reference 150.

France: Common Market regulations will make the use of tachographs obligatory on any vehicle being built after April 1, 1975, and also will require that certain types of vehicles built prior to 1975 be so equipped by April 1978. However, the French Ministry of Transportation has imposed the following dates for mandatory installation of tachographs on vehicles registered in France:

- All new vehicles over 19 tons including highway buses, semi-trailers and dangerous cargo carriers—Jan. 1, 1973
- All buses (highway)—July 1, 1973
- All semi-trailers and dangerous cargo carriers—July 1, 1974
- All trucks of more than 19 tons —Jan. 1, 1975

It is estimated that by 1973 the French market for tachographs should reach 20,000 units and the European Communities market in 1975 will be over 80,000 units. The market should offer good potential for sales by American companies willing to adapt their models to the metric system and to local preferences. As an alternative, U.S. companies may be able to sell licensing rights.

An Export Trade Opportunity was published in *Commerce Today* on May 31, 1971 indicating that the French firm J. Izart et Compagnie, 27 Avenue Saint-Laurent, 91–Orsay, France has shown an active interest in importing U.S.-made tachographs.

Dominican Republic: As of Jan. 1, the Dominican Government has placed into force a new tariff based on the Brussels Tariff Nomenclature (BTN). Imported goods must show, in the consular invoice and the commercial invoice, the four first digits of the BTN numbering system.

Bolivia: The Government has announced a new investment law designed to attract foreign capital for the installation of industrial complexes which can compete internationally. The law covers industry, mining, agriculture, cattle raising, renewable natural resources, construction and tourism but excludes petroleum, gas and services. Eligible activities will enjoy specified benefits and guarantees which include tax and customs exemptions and/or holidays and dividend convertibility. The law appears to apply equally to both domestic and foreign investments.

Furthermore, strategic industries such as metallurgy, steel and petro-chemicals can be joint ventures with a majority of foreign capital but must revert to majority Bolivian ownership within 25 years. However, investments operating under foreign guarantees, insurance or loans will be subject to agreements between the Government of Bolivia and the interested governments.

International Business Reports

Exporting to the United States. 1972. Published by the Bureau of Customs, U.S. Department of the Treasury. 96pp. $1.

This booklet has been prepared primarily for the information and assistance of those who plan to export to the United States. The volume and complexity of imports into the United States, according to the Customs Bureau, necessitates that certain definite procedures be followed, and those who import into the United States must have the cooperation of the exporter in order to follow the necessary procedures. In addition, there are some requirements, such as those relating to marking and preparation of invoices, which must be met by the exporter himself. This booklet outlines the procedures.

Write: Superintendent of Documents, Washington, D.C. 20013.

Technology and International Trade. Proceedings of the National Academy of Engineering Symposium. 146pp. $4.75.

At this Symposium, held Oct. 14-15, 1970, businessmen, government officials and educators discussed Technology and U.S. Trade: A Historical Review; Concerns about the Present American Position in International Trade; Technology and Industry Structure; Computers and International Trade; The Automobile and International Trade; Textiles and International Trade; and Machine Tools, Imports, and National Security.

Write: National Technical Information Service, U.S. Department of Commerce, Springfield, Va., 22151. (Include order number PB 205-012.)

International Construction Reporter. Published weekly. $395 per year.

This service reports information on tender notices and contract awards for major foreign construction, supply architecture and engineering projects emanating from government and private agencies. The value of most projects listed exceeds $1 million. Each listing includes names and addresses for direct contact.

Write: International Construction Reporter, P.O. Box 536, Oakland, Cal. 94604.

Netherlands-American Trade Directory. 1971-72. Published by the American Chamber of Commerce in the Netherlands. $20.

This volume, which updates the 1969-70 edition, contains listings of U.S. subsidiaries established in the Netherlands, licensees, joint ventures, and complete U.S.-Dutch agency relationships.

Write: American Chamber of Commerce, in the Netherlands, Carnegieplein 5, The Hague, Netherlands.

West German Balance of Payments: The Prelude to European Monetary Integration. By William P. Wadbrook. 1972. 340pp. $17.50.

This analysis of the relationship among national goals, domestic interests, and balance of payments aims and measures is designed to serve as an approach to the problem of coordination of national balance of payments policies. Included is data on the 1971 revaluation.

The author concludes that a largely deliberate policy of "dynamic under-evaluation" has served German interests well and will be difficult to reverse. He discusses the implications of this conclusion for the continuing international debate on monetary reform and integration.

Write: Praeger Publishers, 111 Fourth Ave., New York, N.Y. 10003.

Calendar For World Traders

Jan. 26—San Francisco—Seminar on the Domestic International Sales Corp. (DISC) program. Sponsors: San Francisco REEC, Oakland World Trade Club, World Trade Assn. of Greater San Francisco C. of C., Commerce Field Office.

Jan. 27—Buffalo—Dinner meeting of Buffalo World Trade Assn., Continental Inn Restaurant, 3456 Delaware Ave., Kenmore. Subject: Trade with China.

Feb. 1—Chicago—Automotive Exporters Club meeting, Builders Bldg.

Feb. 1—New York—FCIB luncheon and roundtable conference on international finance, credit, collection and exchange problems, Summit Hotel, noon.

Feb. 2 — Nashville — International business seminar, Chamber of Commerce conference room.

Feb. 3—Cleveland—World Trade Assn. meeting, American Room of the Mid-Day Club, 11:30 a.m.

Feb. 8—Chicago—Export seminar, Commerce Field Office.

Feb. 9—New York—FCIB Publishers Export Credit Group dinner meeting, Advertising Club, 4 p.m.

Feb. 10 — Chicago — International Trade Club luncheon, LaSalle Hotel.

Feb. 15—New York—FCIB Hardware-Automotive and Allied Trades Group luncheon meeting, Advertising Club. 12:30.

Feb. 16—Chicago—Chicago Midwest Credit Management Assn. meeting, Bismarck Hotel.

Feb. 18-19—Atlanta—Georgia International Trade Assn. workshop, Georgia State U. Sponsor: Commerce Field Office.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine. The section that follows presents details about U.S.-sponsored overseas exhibits, licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies and appoint agents, details on major construction and expansion projects, and notices of U.S. visits by foreign buyers.

U.S. Promotions Overseas

GERMANY. Pollution Control Equipment and Instrumentation. U.S. manufacturers can enlarge their share of the $1.3 billion German pollution control market by exhibiting air and water pollution sampling, measuring, analyzing, and control instrumentation, reverse osmosis systems, and "clean room" equipment. While Germany makes the most of its own pollution treatment equipment, both German industry and government enforcement agencies look to the United States for the best quality and most advanced technology, the most important factors in their purchasing decisions. Call Lee Swift, Jr. 202-967-4461. Frankfurt Trade Center, March 20-24.

AUSTRALIA. Mini-Midi Computers & Software. The dynamic Australian EDP market more than doubled in 1970 over 1969, from $36 million to $72 million. A growth rate of approximately 20 percent per year is projected for the 1972-74 period, during which U.S. manufacturers are expected to increase their current 50 percent share of the market, which is supplied almost entirely by imports. The current trend toward small computers is attributed to the nature of the Australian economy, which is comprised mainly of small to medium-sized businesses for which larger computers or time sharing operations are not often practical. Call John Klingelhut, 202-967-5751. Sydney Trade Center, April 17-21.

FRANCE. Materials Test and Quality Control Equipment. The French market for materials test and quality control equipment offers a substantial opportunity to U.S. suppliers since it is estimated that imports are equivalent to about 45 percent of French production. Estimates of imports were $22.5 million in 1970 and are expected to increase by $2 million annually through 1973. The Exhibition will feature electrical and electronic test and analyzing equipment as well as sophisticated mechanical equipment. Call Charles M. Whitley at 202-967-4961. Paris Trade Center, April 17-21.

UNITED KINGDOM. Transducer Instrumentation Exhibition. Growth in electronic monitoring and control has focussed British interest on latest U.S. developments in the transducer instrumentation field. A special survey has found prospects for a variety of American instrumentation equipment with applications in advanced industrial and research fields. Call Eugene F. Shaw, 202-967-3838. London Trade Center, April 17-21.

SCANDINAVIA. Electronics Production and Test Equipment. Scandinavian output of electronics products rose to an estimated $1 billion in 1970 with production forecast to increase rapidly. Investments in production and test equipment amounted to nearly $70 million, of which Sweden accounted for half. To meet projected output targets, Nordic firms plan to sharply increase their outlays for this equipment which is mainly imported from outside the four-country area. Prospective buyers in Scandinavia are especially interested in microcircuit-semiconductor, printed circuit and numerically controlled production equipment and electronic test instruments. U.S. suppliers now have a major share of this growing market and stand to benefit substantially from greater promotional efforts. Call George Kemp, 202-967-3088. Stockholm Trade Center, April 17-22.

YUGOSLAVIA AND EASTERN EUROPE. Air Conditioning, Commercial Refrigeration, Food Processing and Packaging Equipment. Eastern Europe and Yugoslav enterprises are demonstrating an increasing awareness of the need for modern equipment that will help them compete in tourism and export markets. Awareness has now reached the demand stage for these kinds of equipment. Exhibiting manufacturers wishing to get in on the ground floor will be given special advantages. For further information about Food Processing and Packaging call Thomas N. Nisbet 202-967-4161. Information about the Air Conditioning and Commercial Refrigeration opportunities is available from Fred E. Crosley, Jr., 202-967-4162. Zagreb International Spring Fair, April 17-23.

ITALY. Industrial and Commercial Security. Economic expansion has created security problems which can be remedied by sophisticated systems and devices. The number of security-conscious businessmen has increased significantly, resulting in a good market for such equipment. Call Robert B. Wallace, 202-967-4508. Milan Trade Center, May 9-13.

ARGENTINA. Quality Control and Reliability Equipment Exhibition-Seminar. This is the inaugural event of the first U.S. Regional Trade Development Center to be established in South America. As Latin American industry continues to expand, increased emphasis is being placed on automation and quality control. The Argentine Government is fostering quality control and provides incentives for firms to purchase such equipment. The shortage of skilled labor assures a bright sales potential in the semi and fully automated equipment field. U.S. exports of quality control equipment to Argentina topped $4 million in 1970. Imports of sophisticated control, measuring, and testing equipment will grow considerably as limited local production is unable to supply the expanding industrial complex with equipment used in dimensional, non-destructive environment and optical testing. A seminar featuring the presentation of papers reflecting the latest in quality control technology is an added attraction to this exhibition. Call Franc Manzolillo, 202-967-3752. Buenos Aires Trade Center, May 15-19.

FRANCE. Food Processing and Packaging Equipment. Backed by a multi-national market promotion campaign sponsored by the Bureau of International Commerce, this show will be aimed at a blue-ribbon group of buyers, agents, and distributors in France, U.K., Germany, Sweden, Denmark, Belgium and the Netherlands. This combined market is expected to rise from $241.6 million in 1969 to 454.2 million in 1975. Products in highest demand in this seven-country group are: Food processing—canning and preserving machinery and equipment; meat processing machinery and equipment; convenience and snack-food-processing machinery and equipment; and bakery and dairy equipment. Packaging—casing and cartoning machinery and equipment; automatic palletizers and de-palletizers; automatic check weighing machinery; shrink wrapping machinery and equipment; form-fill and seal machinery and equipment; bagging, twisting and typing machinery and equipment; high-speed, high volume beverage bottling lines; and thermo-forming machinery and equipment. Call John Wolf, 202-967-4942. Paris Trade Center, May 15-19.

GERMANY. Autoplast '72. This show will feature controls, instrumentation, automated machines and systems for the plastic production industry. Newly developed machines, certain raw materials and specialty products in demand in Germany will also be included. By 1975, plastics production in the Federal Republic is expected to reach 6.6 to 8.8 million tons, an annual increase in output of 5 to 10 percent. Dramatic growth in plastics use is occurring in the building industry, in packaging, in the automobile

industry and in plastic furniture. Call A. J. Beiring, 202-967-3713. Frankfurt Trade Center, May 15-19.

UNITED KINGDOM. Materials Management Equipment. British buyers are seeking new and more sophisticated equipment and systems to fill their materials handling needs. Rapidly rising labor costs, coupled with tax incentives for capital investments, are encouraging British buyers to look to the United States for many types of equipment. This exhibition will be held in conjunction with the International Mechanical Handling Exhibition (IMHEX). Call Don Schmadel, 202-967-4601. London Trade Center, May 15-19.

JAPAN. Metal Surface Finishing and Treatment Equipment and Supplies Exhibition. Targets of the pre-show promotion campaign in Japan will be marketing, administrative and engineer personnel of the Japanese automobile manufacturers and body makers, metal processors and platers, housewares and major appliance manufacturers, the electronic and electrical industries, and ship builders and paint applicator makers. Also considered will be individual exhibitor end user interests. Call Robert Levine 202-967-4705. Tokyo Trade Center, May 22-27.

ITALY. Automotive Service Equipment, Supplies, and Auto Accessories. Auto sales in Italy have experienced tremendous growth in the last decade, requiring corresponding growth in the automotive maintenance and repair facilities. Motor vehicle registration in Italy reached 11.2 million units in 1970, and in 1972 the Italian auto industry is expected to produce a record 2 million vehicles. Italian purchases of automobiles is forecast at 2.6 to 2.7 million cars a year by 1980. This show offers U.S. manufacturers an opportunity to exhibit all automotive-related equipment. Call Gus Duda, 202-967-2434. Paris Trade Center, May 23-27.

MEXICO. Advanced Business Equipment. American manufacturers are urged to bring and display their latest equipment to Mexico City, where they will find a ready market and benefit from concentrated sales exposure before a wide but select audience of key buyers. Mexican imports of business equipment are estimated at $41 million for the year 1971, and U.S. firms supply an estimated 50 percent of this total. An intensive preshow market promotion campaign will be conducted by the new U.S. Trade Center to draw the maximum quality audience in this market, which is growing at 10 percent a year. Call Jim Blow, 202-967-4311. Mexico City Trade Center, June 5-9.

SCANDINAVIA. Industrial Process Controls. As a highly industrialized region, Scandinavia continues to undergo expansion and diversification of processing industries. Rising costs and labor shortage are forcing plants to automate in order to remain competitive. Manufacturers are consolidating facilities to achieve greater efficiency. Such factors are creating a growing demand for industrial process controls and related automation equipment. Investment in new equipment in 1971 reached an estimated $45 million in Sweden alone. About two-thirds of total Swedish process control consumption is imported. Call Lee Swift, 202-967-4461. Stockholm Trade Center, June 5-10.

JAPAN. Computers, Peripheral Equipment and Software. Japan is one of the best export markets for U.S. computers, peripheral equipment, parts and accessories for computing equipment. In 1970 exports from the United States to Japan exceeded $155,000,000. The trend in U.S. sales through the first four months of 1971 points to a further increase to at least $165,000,000. Dependence on imports of U.S. high technology computing equipment and parts is expected to continue for several years. The outlook for U.S. exports of software packages is also bright. Call Maurice Shea, 202-967-4511. Tokyo Computer '72, June 8-13.

POLAND. Industrial Process Control Equipment. Polish industrial production has grown at a rate of 9 percent per year during the last decade. In this drive toward industrialization, Poland has developed several modern industries including machine building, metallurgy, power and fuel, chemical, and transportation equipment. Continued industrial investment and a rising standard of living, as well as further planned expansion suggest that the Polish market offers excellent prospects to producers of industrial process control equipment. The main guidelines for future development of Polish industry indicate rapid expansion in those branches of industry which accelerate technological advance and increase the efficiency of labor. They emphasize industrial automation and stress control and measuring apparatus, electronic components, and general purpose machines. They also stipulate revamping and modernization of Polish processing industries and development of the chemical industry. This heavy planning emphasis suggests that the demand in Poland for industrial automation equipment including industrial process control equipment will expand within the current five-year plan period. American machinery and instruments enjoy an excellent reputation among Polish businessmen because of advanced design, reliability and quality construction. There is room for increased sales of such goods to Poland for those U.S. firms that make a conscientious effort to cultivate the market systematically. Call Oleg Jerschkowsky, 202-967-5777. Poznan International Fair, June 11-20.

FRANCE. Apparel Manufacturing Equipment. Sales by the French apparel industry have increased spectacularly. A main factor in these sales advances is the new attention given by French apparel manufacturers and big-name couturiers to the creation and marketing of modish but moderately priced ready-to-wear clothing for men and women. Gross sales of the French ready-to-wear manufacturers were estimated at $1.5 billion in 1969. If the French are to keep their international reputation as fashion leaders in the era of mass production, they must continually purchase new machinery and adopt sophisticated production techniques. This exhibition will feature equipment with high sales potential in France as indicated by recent market research: machines for all cloth operations (spreading, folding, winding, measuring, examining, cutting), advanced sewing machine accessories (buttonhole making, button sewing, collar shaping and cutting), belt and tab turners, permanent press equipment, laminating and automatic pressing equipment. Call Don Johnson, 202-967-2795. Paris Trade Center, June 12-16.

GERMANY. Passive and Electromechanical Electronic Components. Manufacturers of passive components in the largest and fastest growing electronics market in Europe expect average annual growth rates of 8 to 10 percent over the next three years. Modernization and expansion of the telephone system, the development of the Bundespost data transmission network, continuing industrial automation, increasing investment in R and D, intensified legal enforcement of pollution control and traffic regulations and the increasing share of electronics in consumer goods are expected to insure an expanding market for electronic components. Call Jack Crown, 202-967-4421. Frankfurt Trade Center, June 12-16.

JAPAN. Lasers & Fiber Optics. The Japanese market for lasers and fiber optics is in its early growth stages, net purchases of lasers in 1970 coming to nearly $5 million and fiber optics slightly less than $12 million. Annual purchases in the next few years are expected to rise very rapidly, 35-40 percent for lasers and 20-25 percent for fiber optics. Imports are expected to play an important part in meeting Japan's future demands with the United States supplying as much as 30 percent yearly. Industrial applications of electro-optics hold high interest for Japan, including IC plate processing, communications, measurement, and holographic quality control. Japan's technology lag in laser development is said to be as much as five years behind the United States, as is the case with CO2 and Krypton lasers, and commercial-industrial laser systems. Call Randall Miller, 202-967-4512. Tokyo Trade Center, June 19-24.

ITALY. Assembly Engineering Equipment Exhibition. In 1970 Italian industry purchased $200 million worth of assembly equipment, fasteners, adhesives, and related products and equipment. Italian firms are increasingly attempting to find the latest products and equipment which will enable them to reduce both the time and labor required for assembly processes. Because Italian wage rates are the highest in history, manufacturers are seeking to remain competitive by reducing costs of production. U.S. manufacturers will have an opportunity to display the following products: adhesives, pressure sensitive tapes, hot melt adhesive applications, stapling machines, wire stitching machines, automatic wire wrapping equipment (electronic assembly), assembly machines, special fasteners, stud welding systems, ultrasonic welders, torque/tension analyzers and testers, and all other similar and assembly-related equipment. Call Sam Spaulding, 202-967-3968. Milan Trade Center, June 20-24.

THAILAND. Bangkok 72 Construction Equipment & Building Products Exhibition. Thailand has experienced a construction boom in the past decade that has given the nation new roads and office buildings, factories, dams, hotels and homes. During this period the construction industry has expanded and diversified until it is now one of the most energetic sectors of the economy. The average growth rate for construction during the last 10 years was 15.2 percent, fifth highest of all Thai industries. Thai builders, architects, contractors and subcontractors have expressed interest in seeing the latest and best in U.S. equip-

Sales opportunities in seven U.S. commercial exhibitions, trade fairs and solo exhibitions and 20 shows at the nine U.S. Trade Centers are being offered to present and potential U.S. exporters between now and October.

Each Trade Center exhibition is limited to one particular line of products and centers are located in Bangkok, London, Milan, Mexico City, Frankfurt, Stockholm, Sydney, Tokyo and Paris. For further information on the Trade Center shows described or for more facts on U.S. exhibitions, **write:** *Commercial Exhibits Program, BIC-932, U.S. Department of Commerce, Washington, D.C. 20230.*

Trade missions are groups of U.S. businessmen organized to travel abroad promoting the export of U.S. goods and services made by their particular industry. **Write:** *Trade Missions Div., BIC-926, U.S. Department of Commerce, Washington, D.C. 20230.*

ment. The present five-year development plan places considerable emphasis on construction of new roads. Call T. R. Padgett, 202-967-4727. U.S. Regional Trade Development Center, Bangkok, late June.

MEXICO. Food Processing Machinery and Equipment Exhibition. Increased sales of food processing equipment by U.S. manufacturers are made possible by the continuing modernization and expansion programs by both Mexican and foreign food processors, including subsidiaries of U.S. firms. Imports of food processing equipment into Mexico climbed to $10.5 million in 1970, and are expected to reach $15 million by 1975. Expansion and modernization of this industry will present attractive opportunities to U.S. companies, who captured two thirds of all Mexican imports during the 1966-70 period. This is the most important market in Latin America for American food processing equipment manufacturers. Call Bob Vigneault, 202-967-4311. Mexico City Trade Center, Sept. 4-8.

ITALY. Plastics & Plastic Processing Equipment. Italy, the second largest plastic producer in Europe and one of the world's fastest growing consumers of plastics, is hosting the world's second largest plastics exhibition, PLAST '72. This international fair is a key vehicle for entrance into the entire European plastics market. Italian consumption of plastics has been growing at an average annual rate of 20 percent for the last five years; this is expected to continue. Research has confirmed good sales potential for specialty plastics, modern, automated plastic processing machinery, and selected semifinished and finished plastic products. Call Robert Wallace, 202-967-4508. U.S. Commercial Exhibition, PLAST '72. Milan, Oct. 8-15.

SWITZERLAND. Nuclear Equipment. The application of nuclear technology for industrial, medical and scientific purposes is one of the fastest growing and most promising fields. As commercial applications of nuclear technology become more widespread, the market for nuclear equipment and instruments will expand. The European market is becoming especially attractive as programs for nuclear energy for power generation and the use of nuclear technology for many other uses become a multibillion dollar business. Sales of nuclear equipment are rising as the industrialized countries of Western Europe expand their activities in this field. New opportunities for U.S. suppliers of nuclear equipment are opening up. Call John Wolf 202-967-4974. U.S. Commercial Exhibition, NUCLEX '72, Basel, Oct. 16-21.

TAIWAN. Exhibition of Equipment for Business and Industry. This will be the third exhibition of its type to be held in Taiwan. At the Exhibition held in Taipei from Nov. 30-Dec. 5, 1970, 50 U.S. manufacturers sold $516,515 worth of equipment during the show and forecast over $12 million in sales within two years from sales contacts made at the exhibition. The United States is Taiwan's second largest supplier, with a 34.4 percent share of the market in 1970. The following U.S. equipment is believed to have the best market potential in Taiwan in 1972: testing, measuring, quality control and scientific instruments; construction materials handling equipment; metalworking equipment and machine tools; power and hand tools; electronic production and test equipment; office machinery and computing equipment; air conditioning and refrigeration equipment; and pumps, valves and compressors. Call J. David Anderson, 202-967-4858. Taipei '72 U.S. Solo Exhibition, Oct. 16-21.

Space Fully Booked

The following exhibitions and trade missions in which all exhibit space has been reserved are still open for visits by interested industry representatives. U.S. firms with sales representatives in these market areas may wish to ask them to investigate the shows.

Data Communications Equipment, Milan Trade Center, Feb. 22-26; Metalworking Equipment & Controls, Mexico City Trade Center, March 6-10; Analytical Laboratory Apparatus Exhibition, Milan Trade Center, March 14-18; Minicomputers & Related Peripherals, Paris Trade Center, March 20-24; High Fidelity and Stereophonic Equipment, London Trade Center, March 20-24; Building Products and Construction Equipment, Scandinavia Trade Center, March 20-25; Industrial Process & Analytical Instrumentation, Mexico City Trade Center, April 24-28.

Listing Concluded For Almost 1,000 World Trade Fairs Scheduled Abroad

U.S. businessmen interested in establishing an export program or expanding an existing one have almost 1,000 worldwide trade fairs at their disposal to help their sales promotion efforts.

To assist American businessmen in the selection of appropriate fairs, *Commerce Today* periodically publishes a schedule of future international fairs. These exhibitions range from the general type, which promotes sales in numerous product categories, to the highly specialized fair, designed to attract buyers of specific products.

Events are listed by country, city, name, date and fair management address and are generally open to participation by any U.S. company in the related industry. Each firm may make arrangements for its own exhibit, including rental of space and utilities, transportation of products and setting up and manning of the booth, by communicating with the fair management directly at the listed address.

Firms with limited experience in the field of international trade may find the tentatively scheduled U.S. Department of Commerce exhibitions especially helpful. These fairs are identified by a ★. Fairs in which the Department is participating in cooperation with local agents of U.S. firms located in foreign countries are identified by a ●. For information on Department-sponsored events, address inquiries to the nearest Commerce Field Office (see inside back cover). For fair catalogs and more detailed information on listed events, **write:** Constance L. White, OITP Trade Fairs Coordinator, Bureau of International Commerce, Washington, D.C. 20230 (202-967-4671).

Some trade fair entries in the schedule below include a DIB (Domestic and International Business) order number—indicating that a report is available on a particular fair. Requests for these reports should be directed to Export Information Services Division, Bureau of International Commerce (BIC-976), U.S. Department of Commerce, Washington, D.C. 20230. The DIB number as well as the name and location of the fair should be included to assure proper identification of the report.

The following information on upcoming fairs is taken from the latest data available to the Department of Commerce. However, the Department cannot assume responsibility for accuracy of dates or for the outcome of any transactions with foreign fair managements.

About half of the list—alphabetical by country, Afghanistan through Jamaica—appeared in the Jan. 10 issue. The second half, concluding the presentation, follows:

Japan

Nagoya

March 19-21. Meat Processing Machinery Show. Meat Press (Shokuniku Tsushinsha), Sanriku Bldg., 1-2-11, Higashi Shinbashi, Minato-ku, Tokyo. Annual.

March 22-25. New Packaging Show. Japan Packaging Times (Hoso Sangyo Shinbunsha). Osato Bldg., 1-3-4, Iwamoto-cho, Chuo-ku, Tokyo. Annual.

April 6-11. All-Japan Best Machine Show. Industrial Daily News, 1-8-10, KudanKita, Chiyoda-ku, Tokyo. Annual.

April 6-11. Metal Press Industry Show. Industrial Daily News, 1-8-10, Kudan Kita, Chiyoda-ku, Tokyo. Annual.

April 20-23. 5th Modern Scientific Equipment Show. Nihon Kogya Shinbun, 27, Umeda, Kita-ku, Osaka. Annual.

May 11-17. The 10th All-Japan Machine Tool Show. Kikai Kogya Shinbun, Ltd., 5-5 Shiba Koen, Minato-ku, Tokyo. Annual.

May. Better Living Show. Chunichi Shinbunsha, Ltd., 3-12 Marunouchi, Naka-ku, Nagoya. Annual.

June 20-24. Gas and Kerosene Appliance Show. The Japan Assn. of Gas and Kerosene Appliances (Nihon Gas Sekiyu Kiki Kogyokai), 13-7 Higashi Ueno 1-chome, Taito-ku, Tokyo. Annual.

June. Business Machine Show. Chubu Jimukikaika Kyokai, 44 Higashi Futaba-cho, Higashi-ku, Nagoya. Annual.

June. Confectionery and Related Industry Show. Aichi Prefecture Confectionery Industry Assn., 7-5 Kikui, Nishi-ku, Nagoya. Annual.

September. Plastic Industrial Show. The Industrial Daily News, Nagoya Office, 1-11 Takaoka, Higashi-ku, Nagoya. Annual.

Oct. 2-13. Good Design Show. Aichi Prefectural Government, Nagoya City Government, and the Chamber of Commerce, Nagoya. Annual.

Oct. 2-13. Japan Machinery Fair. Aichi Prefectural Government, Nagoya City Government and Chamber of Commerce, Nagoya.

Oct. 25-28. The 18th Electrical Construction Materials and Equipment Fair. Japan Electric Contractors Association, 1-7 Moto Akasaka, Minato-ku, Tokyo. Annual.

October. Nagoya Woodworking Machinery and Equipment Fair. Chubu Woodworking Machinery Assn., 5-36 Iwai-cho, Naka-ku, Nagoya. Annual.

November. Electronics Show. Chubu Electronics Promotion Assn., 32 Numaike-cho, Higashi-ku, Nagoya. Annual.

Dec. 3-5. Foreign Automobile Show. Automobile Importers Assn., Chubu Office, c/o Yanase & Co., Ltd., 1-5 Maruta-cho, Naka-ku, Nagoya. Annual.

Dec. 10-14. Auto Show. Aichi Prefecture Automobile Fed., 2-15, Takiko-dori, Showa-ku, Nagoya. Annual.

Osaka

April 18-May 1. INTER-ENGINEERING 72. Osaka International Trade Fair Comm., 58 Uchihonmachi, Hashizume-cho, Higashi-ku, Osaka. Biennial.

May 10-14. Osaka Auto Accessory Show. Nihon Kogyo Shinbun, 27 Umeda, Kita-ku, Osaka. Annual.

May 18-24. First Industrial Anti-Pollution Device Show. Industrial Daily News (Nikkan Kogyo Shinbun), 2-1 Maeno-cho, Kyobashi, Higashi-ku, Osaka. Annual.

May 18-24. 12th Excellent Machinery Fair. Industrial Daily News (Nikkan Kogyo Shinbun), 2-1 Maeno-cho, Kyobashi, Higashi-ku, Osaka. Annual.

May 18-24. Anti-Industrial Pollution Devices Show. Industrial Daily News (Nikkan Kogyo Shinbun), 2-1 Maeno-cho, Kyobashi, Higashi-ku, Osaka. Annual.

June 13-17. 15th Japan New Packaging Show. Nihon Hoso Times, Ltd., 4-4-5, Iidabashi, Chiyoda-ku, Tokyo. Annual.

July. Fluid Power & Industrial Robot Show. Nihon Kogyo Shinbun, 27, Umeda, Kita-ku, Osaka. Annual.

Sept. 8-12. Osaka Industrial & Engineering Materials Exbn. Industrial Daily News, 2-1 Maeno-cho, Kyobashi, Higashi-ku, Osaka. Annual.

Sept. 8-12. Osaka Engineering Designing Efficiency Exbn. Industrial Daily News, 2-1 Maeno-cho, Kyobashi, Higashi-ku, Osaka. Annual.

September. Business Show. Nippon Office Management Assn., Osaka Office, 1-118 Utsubo, Nishi-ku, Osaka. Annual.

Oct. 9-16. JAPAN PLAS—Japan 4th Int. Fair of Plastics. Plastic Mihonichi Kyokai, 38 Kita-Ogimachi, Kita-ku, Osaka. Annual.

October. Surface Treatment Show. Nihon Kogyo Shinbun, 27 Umeda, Kita-ku, Osaka. Annual.

October. Japan Machinery Metal Exbn. Nihon Kogyo Shinbun, 27, Umeda, Kita-ku, Osaka. Annual.

October. Anti-Pollution Show. Nihon Kogyo Shinbun, 27 Uemda, Kita-ku, Osaka. Annual.

October. 11th Vending Machine Fair. Japan Vending Machine Manufacturers Assn., Shiba Building 3-6-3 Nishi-Shinbashi, Minato-ku, Tokyo. Annual. Held in Osaka triennially.

Tokyo

Jan. 27-29. 13th Material Exbn. of Dairy Products and Machines. Shokuryo Times (The Foodstuff Times), Nitta Bldg., 8-2-1 Ginza, Chuo-ku, Tokyo. Annual.

March 15-17. Japan Self-Service Fair & Supermarket Fair. Japan Self Service Assn., TOC Bldg., 7-22 Nishi-Gotanada, Shinagawa-ku, Tokyo. Annual.

March 15-20. 7th Advanced Imported Woodworking Machinery Exbn. Japan Woodworking Machinery Trade Assn. Mokko Kaikan Bldg., 6-15-7 Hon-Komagome, Bunkyo-ku, Tokyo. Annual.

March 16-20. 11th Boat Show. Japan Boat Promotion Assn., 3-5-2 Ginza, Chuo-ku, Tokyo. Annual.

March 22-27. Japan Refrigeration and Air-Conditioning Exbn. Japan Refrigeration and Air-Conditioning Industry Assn., 6-15-2 Ginza, Chuo-ku, Tokyo. Annual.

March 25-30. 2nd Anti-Pollution Exbn. The Nihon Kogyo Shinbun, 1-7-2 Otemachi, Chiyoda-ku, Tokyo. Annual.

April 7-12. 7th Int. Metalworking Machines Exbn. The Industrial Daily News, 1-8-10 Kuda-Kita, Chiyoda-ku, Tokyo. Annual.

April 7-12. 3rd Labor Saving and Automatic Machinery Exbn. Industrial Daily News, 1-8-10 Kuda-Kita, Chiyoda-ku, Tokyo. Annual.

April 23-28. 44th Business Show. Nippon Office Management Assn., Seikyo Bldg., 4-1-13 Sendagaya, Shibuya-ku, Tokyo. Annual.

May 4-14. 2nd Tokyo Int. Good Living Show. Tokyo Inter-National Trade Fair Comm., 4-16, Harumi, Chuo-ku, Tokyo. Biennial.

May 11-16. 12th Int. Industrial and Engineering Materials Exbn. and Modern Engineering Design and Materials Show. Industrial Daily News, 1-8-10 Kita-Kudan, Chiyoda-ku, Tokyo. Annual.

May 12-16. 72 JAPAN NEW PACK—Packaging Show. Nihon Hoso Times, 4-4-5 Iidabashi, Chiyoda-ku, Tokyo. Annual.

May 12-19. 17th Electrical Construction Materials and Equipment Fair. Japan Electrical Contractors Assn., 1-7 Moto-Akasaka, Minato-ku, Tokyo. Annual.

May 20-24. 11th Metal Finishing Show —Met Show. Metal Finishing Society of Japan, Kyodo Bldg., 2 Kanda Iwamoto-cho, Chiyoda-ku, Tokyo. Annual.

May 24-27. Mining Machinery Exbn. Mining & Metallurgical Institute of Japan. Prince Hotel, Tokyo.

June 1-4. 72 Auto Service Equipment Show. Japan Automotive Machine Service Equipment Assn., 2-27-24, Ebisu, Shibuya-ku, Tokyo. Annual.

June 2-5. 13th Screw Machine and 3rd Industrial Fastener Show. Kinzoku Sangyo Shinbun-sha (The Metal Industry News), 3-23-6, Nishi-Shinbashi, Minato-ku, Tokyo. Annual.

June 8-13. ★U.S. Solo Exbn: TOKYO COMPUTER 72. Maurice Shea, BIC-950, U.S. Dept. of Commerce, Washington, D.C. 20230.

June 13-18. 72 Mechanical Handling Show. Japan Management Assn., Kyoritsu Bldg., 25 Shiba Koen, Minato-ku, Tokyo. Annual.

June. 3rd Cargo Handling Equipment Show. Nihon Kogyo Shinbun, 1-7-2 Otemachi, Chiyoda-ku, Tokyo. Annual.

June. Auto Accessories Show. Japan Automobile Accessories Wholesalers Assn. Mori Bldg. No. 5, 25 Sakuragawa-cho, Shiba Nishikubo, Minato-ku, Tokyo. Annual.

July 7-11. 2nd Electronic Industry Show. Industrial Daily News, 1-8-10 Kita-Kudan, Chiyoda-ku, Tokyo. Annual.

July 7-11. 6th Audio-Visual Industrial Training Equipment Show. Industrial Daily News, 1-8-10 Kita-Kuada Chiyoda-ku, Tokyo. Annual.

July. Construction Equipment Fair. Japan Construction Mechanization Assn. 21-1-5 Shiba Koen, Minato-ku, Tokyo. Annual.

Aug. 23-28. Industrial Anti-Pollution Devices Show. Industrial Daily News,

INTERNATIONAL FLAVOR—*At the recent Helsinki trade fair, Ambassador of Japan Toshio Yamanaka (center), U.S. Commercial Attache Edward C. Howatt (left), and Commercial Counselor Martin Y. Hirabayashi view American electronic apparatus at the Finn Metric stand (Computer Design Corp. and others).*

1-8-10 Kita-Kuda, Chiyoda-ku, Tokyo. Annual.

August. Japan Int. Welding Show. K. K. Sampo, 1-11 Kanda-Sakuma-cho, Chiyoda-ku, Tokyo. Annual. (Alternates between Tokyo and Osaka)

Sept. 6-12. ★Tokyo–Pack 72. Japan Packaging Inst., 12-8 Ginza 5-chome, Chuo-ku, Tokyo, and Japan Packaging Machinery Manufacturers Assn., 3-188 Nishi-Shinbashi, Minato-ku, Tokyo. Annual. Alternates between Tokyo and Osaka.

Sept. 21-27. 72 Japan Electronics Show. Electronic Industries Assn., Tosho Bldg., 3-2-2 Marunouchi, Chiyoda-ku, Tokyo. Annual.

Oct. 4-9. 72 Chemical Plant Show. Japan Management Assn., Kyoritsu Bldg., 25 Shiba-Koen, Minato-ku, Tokyo. Annual.

Oct. 4-9. 72 Heating, Air-Conditioning and Sanitary Equipment Exhibition. Japan Management Assn., Kyoritsu Bldg., 25 Shiba-Koen, Minato-ku, Tokyo. Annual.

Oct. 4-9. 2nd Int. Ocean Development Exbn. Japan Management Assn., Kyoritsu Bldg., 25 Shiba Koen, Minato-ku, Tokyo. Annual.

Oct. 4-9. 13th Int. Plant Engineering and Maintenance Show. Japan Management Assn., Kyoritsu Bldg., 25 Shiba-Koen, Minato-ku, Tokyo. Annual.

Oct. 8. Living of Tomorrow Consumer Show. Nihon Kogyo Shinbun, 1-7-2 Otemachi, Chiyoda-ku, Tokyo.

Oct. 17-20. Tokyo International Good Living Show & Housing Industry Exhibition. Tokyo Int. Trade Fair Comm., 4-16-12, Harumi, Chuo-ku, Tokyo.

Oct. 24-27. 11th Analytical Instrument Show. Japan Analytical Instrument Manufacturers Assn., Shin Yamashiro Bldg., 2-10 Ogawa-cho Kanda, Chiyoda-ku, Tokyo. Annual.

October. 72 Scientific Instruments Show. Tokyo Scientific Instrument Assn., Shin Miyako Bldg., 7 Honcho 3-chome, Nihonbashi, Chuo-ku, Tokyo. Annual.

October. 11th Japan Int. Toy Fair. Japan International Toy Fair Assn., 3-14, Kotobuki, Taito-ku, Tokyo. Annual.

October. 18th Motor Show. Japan Motor Industry Fed., Otemachi Bldg., 1-6-1 Otemachi, Chiyoda-ku, Tokyo. Annual.

Nov. 2-7. 5th Int. Automatic Control Equipment Show. Industrial Daily News, 1-8-10 Kita-Kudan, Chiyoda-ku, Tokyo. Annual.

Nov. 15-26. 6th Int. Machine Tool Fair. Tokyo Int. Trade Center, 4-6, Harumi, Chuo-ku, Tokyo. Biennial.

Kenya

Nairobi

September-October. Nairobi General Show. Agricultural Society of Kenya (AKS), P.O. Box 30176, Nairobi. Annual. (DIB 70-11-403)

Feb. 23-March 5. OAU—All-Africa Trade Fair. P.O. Box 30302. (For companies with African-based affiliates only).

Korea

Seoul

Oct. 18-27. Korea Electronic Show. Fine Instrument Center, I.P.O. Box 2489, Seoul. Annual.

Lebanon

Beirut

May 4-7. Medical Symposium and Exhibit. Medical products, appliances and equipment. Dr. Amal Kurban, Dept. of Internal Medicine, American Univ. of Beirut, P.O. Box 236, Beirut. Annual.

May. Pharmacy Seminar and Exhibit. Mainly pharmaceutical products. Dr. Amin Haddad, Dir., School of Pharmacy, American Univ. of Beirut, P.O. Box 236, Beirut. Annual.

May. Emee—Engineering Materials and Equipment Exbn. Engineering Alumni Chapter and Student Society, American Univ. of Beirut, P.O. Box 236, Beirut. Annual.

May. Ideal Home Exhibit. Strand Exhibit and Export Center, Strand Bldg., Hamra St., Beirut. Semiannual.

May or August. Chem-Ex—Chemical Industries and Scientific Equipment Exbn. Assn. of Chemists in Lebanon and Chemical Students, American Univ. of Beirut, P.O. Box 236, Beirut. Amal Haddad, Industry Institute, P.O. Box 4324, Beirut. Annual.

November. Ideal Home Exhibit. Strand Exhibit and Export Center, Strand Bldg., Hamra St., Beirut. Semiannual.

Beit-Chabab

Aug. 1-15. Beit Chabab Fair—Commercial, Industrial, Agricultural and Cultural. Beit Chabab Fair Comm., P.O. Box 1057, Beirut. Annual.

Libya

Tripoli

March 1-20. ★Tripoli Int. Trade Fair. P.O. Box 891, Tripoli. Annual.

Luxembourg

Luxembourg

May 27-June 4. Int. Trade Fair. Foire Internationale de Luxembourg (Fil), 60, ave. Victor-Hugo, Luxembourg-Limpertsberg. Annual.

Malta

Naxxar

July 1-15. 16th Malta Int. Trade Fair. Malta Trade Fair Corp., Naxxar. Annual.

Morocco

Casablanca

April-May. Casablanca Int. Trade Fair. 11 Rue Jules Mauran, Casablanca. Biennial.

Mozambique

Lourenco Marques

May 27-June 11. Facim—Int. Fair of Lourenco Marques. Ave. Sagres. Annual.

Netherlands

Amsterdam

Jan. 4-7. HORECAVA—Int. Hotel & Restaurant Equipment Exbn. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Annual.

Jan. 17-22. LAND—EN TUINBOUW RAI 72—Exbn. of Mechanized Equipment for Agriculture & Horticulture. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Biennial.

Jan. 29-Feb. 6. CARAVAN RAI 1972—Int. Exbn. of Trailers & Accessories. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Annual.

Feb. 17-27. Int. Commercial Vehicle Show. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Biennial.

March 10-19. HISWA 72—17th Int. Watersports & Camping Exbn. HISWA, 412 Keizersgracht, Amsterdam. Annual.

April 4-11. AUTOVAK 72—Int. Trade Fair of Garage Equipment & Garage Handtools. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Biennial.

April 9-12. INTERCONTEX AMSTERDAM—Int. Women's Wear & Textile Trade Fair. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Semiannual.

April 21-30. 27th Int. Household Fair. Huishoudbeurs, 94 Gerrit van der Veenstraat, Amsterdam. Annual.

May 16-20. PETROTECH—2nd European Exbn. for Petroleum Technology. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Biennial.

May 24-27. INTERTRAFFIC 72—First Int. Traffic Engineering Exbn. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Frequency unknown.

Aug. 21-25. FEBS-BIOCHEM 72—First Biochemical Laboratory Equipment Exbn. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Frequency unknown.

Aug. 27-29. Int. Men's Fashion Fair. Stichting Herenmodebeurs, 101 van Eeghenstraat, Amsterdam. Annual.

Sept. 19-23. AQUATECH 72—Int. Exbn. on Treatment, Storage, Transport & Usage of Water. Europort Tentoonstellingen N.V., 111 Hoogstraat, Rotterdam. Biennial.

Sept. 25-29. FIAREX 72—Electronics Fair. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Biennial.

Oct. 1-4. INTERCONTEX AMSTERDAM—Int. Women's Wear & Textile Trade Fair. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Semiannual.

Oct. 17-25. EFFICIENCY FAIR 72—Business Machines Fair. R.A.I. Gebouw N.V., 8 Europaplein, Amsterdam. Biennial. Participation through local agent only.

Nov. 14-18. EUROPORT 72—Int. Maritime Exbn. Europort Tentoonstellingen N.V., 111 Hoogstraat, Rotterdam. Annual.

Hilversum

May 15-18. ETAWIMA—3rd Exbn. for Shop Building, Shop Equipment & Display Materials. Europort Tentoonstellingen N.V., 111 Hoogstraat, Rotterdam. Biennial.

Sept. 12-16. RECUPERATIE—Reclamation of Raw Materials from Waste Products. Nedex Vakbeurs N.V., 24 Witte de Withstraat, Rotterdam. Biennial.

Rotterdam

March 14-18. Int. Sanitary & Hygiene Exbn. Europort Tentoonstellingen N.V., 111 Hoogstraat. Rotterdam. Biennial.

Oct. 25-28. HOUT 72—2nd Int. Exbn. for Timber, Timber Products for Building, & Woodworking Equipment. Europort Tentoonstellingen N.V., 111 Hoogstraat, Rotterdam. Annual.

Nov. 6-8. SPOVAK—Int. Trade Fair for Sporting Goods & Camping Articles. SPOVAK, Thurledeweg 63, Rotterdam. Annual.

Utrecht

Feb. 14-18. ROKA—Int. Food & Beverage Trade Fair. Stichting ROKA, 243 Mathenesserlaan, Rotterdam. Biennial.

Feb. 27-March 3. INTERNATIONAL VOORJAARSBEURS—Int. Spring Fair; Consumer Goods. Koninklijke Nederlandse Jaarbeurs, Utrecht. Annual.

March 13-15. HET KIND—Int. Children's Clothing Exbn. Koninklijke Nederlandse Jaarbeurs, Utrecht. Semiannual.

March 19-21. Int. Shoe Fair. Koninklijke Nederlandse Jaarbeurs, Utrecht. Annual.

April 5-12. 8th National Education Exbn. Koninklijke Nederlandse Jaarbeurs, Utrecht. Biennial. (Participation through local agent only).

May 26-June 3. TECHNISHOW—Trade Fair for Machinery & Auxiliary Equipment for the Metal & Woodworking Industries. Koninklijke Nederlandse Jaarbeurs, Utrecht. Quadrennial.

Aug. 27-Sept. 1. Int. Fall Trade Fair. Koninklijke Nederlandse Jaarbeurs, Utrecht. Annual.

Aug. 27-Sept. 1. INTER-DECOR—Home Furnishing Trade Fair. Koninklijke Nederlandse Jaarbeurs, Utrecht. Annual.

Aug. 28-Sept. 1. INDRO—Perfumery Exbn. Koninklijke Nederlandse Jaarbeurs, Utrecht. Annual.

Sept. 11-13. HET KIND—Int. Babies' & Children's Articles & Clothing Fair. Koninklijke Nederlandse Jaarbeurs, Utrecht. Semiannual.

Oct. 19-26. ELEKTROTECHNIEK 72—Electricity Production & Distribution Exbn. Koninklijke Nederlandse Jaarbeurs, Utrecht. First exhibition, frequency unknown.

New Zealand

Auckland

March 17-April 4. New Zealand Easter Show. General Trade Fair. P.O. Box 26-014, Epsom, Auckland. Annual.

Christchurch

Aug. 19-Sept. 2. New Zealand Industries Fair. P.O. Box 13-152, Christchurch. Annual.

Hamilton

June 15-17. New Zealand National Field Days Fair. Farm & Earthmoving Equipment. Keith Edridge Limited, P.O. Box 51, Hamilton. Annual.

Wanganui

May 5-20. New Zealand National Motor & Transport Show. Wanganui Promotions, P.O. Box 821, Wanganui.

Norway

Bergen

April 14-23. House & Home Exbn. A/S Driftsselskapet Bergenshallen, P.O. Box 1264, 5001 Bergen.

Sept. 5-8. OFFICE 72—Kontorteknisk Forening Bergen, 3 M A/S. Strandgaten 207, 5000 Bergen.

Sept. 15-24. FLORA 72—Driftsselskapet Bergenshallen, P.O. Box 1264, 5001 Bergen.

Larvik

Aug. 8-13. Vestfold Exbn. Vestfoldutstillingen, P.O. Box 191, 3250 Larvik.

Molde

Aug. 25-Sept. 3. More & Romsdal Exbn. Norges Varemesse, P.O. Box 130, Skoyen, Oslo 2.

Mysen

Aug. 26-Sept. 3. Mo Market. Mysen & Omegns Red Cross, c/o Einar Nokleby, 1850 Mysen.

Oslo

Feb. 14-20. Agricultural Week. Det Kgl. Selskap for Norges Vel, Rosenkrantzgaten 8, Oslo 1.

March 10-19. Int. Boat Show. Norske Batbyggeriers Landsforening og Motorimportorenes Landsforening, Stortingsgaten 12, Oslo 1.

April 13-23. Holidays & Recreation Show. Norges Varemesse, P.O. Box 130, Skoyen, Oslo 2.

Sept. 28-Oct. 2. NOR-PED 72—Scandinavian School Equipment Exbn. Norges Varemesse, P.O. Box 130, Skoyen, Oslo 2.

Oct. 12-22. Housekeeping Today. Oslo Kolonialkjopmenns Forening, Akersgaten 32, Oslo 1.

Nov. 6-12. Know-How Exbn. Norges Varemesse, P.O. Box 130, Skoyen, Oslo 2.

Stavanger

Sept. 3-10. Better Houses Exbn. Rogalandsmessen A/S. 4000 Stavanger.

September (end). Transportation, Storage & Packaging Fair. Rogalandsmessen A/S. 4000 Stavanger.

Trondheim

April 22-28. MILIEU — Environmental Show. Hval & Lunde, Vognmannsgaten 8, Oslo 1.

June 13-26. ELECTRONICS 72. Hval & Lunde, Vognmannsgaten 8, Oslo 1.

Aug. 14-20. 4th Int. Fisheries Fair. Norges Varemesse, P.O. Box 130, Skoyen, Oslo 2.

Sept. 7-11. Interior Decorating & Flowers. Top-Service, c/o Nidarohallen, 7000 Trondheim.

Sept. 19-22. OFFICE 72—Int. Office Equipment Show. Kontorteknisk Forening, Trondheim, Kjopmannsgaten 16, 7000 Trondheim.

Peru

Lima

April 17-23. TECNOMIN & TECNOPAN—Machinery and equipment for the min-

ing, fishing and food processing industries. Pacific International Trade Fair, P.O. Box 4900, Lima.

Philippines

Manila

October-November. Food Technologists Convention. Philippine School of Nutrition, Food Science and Technology, Philippine Women's University, Taft Avenue, Manila. Annual.

September-October 1973. Packaging Fair & Competition With Associated Symposia. Packaging Institute of the Philippines, P.O. Box 1085, Commercial Center, Makati, Rizal.

Poland

Poznan

June 11-20. ★Poznan Int. Fair. Management Office of Poznan International Fair, Poznan, Glogowska 14. Annual.

Portugal

Lisbon

March 3-12. Int. Exbn. of Sailing, Flying & Camping Equipment. Casa de Portugal, 20 Lower Regent St., London, S.W.I.

April 14-23. Int. Antiques Fair. Casa de Portugal, 20 Lower Regent St., London, S.W.I.

June 9-23. Int. Trade Fair of Portugal. State Information & Tourist Office of Portugal, 20 Lower Regent St., London, S.W.I.

Oporto

Oct. 15-30. Int. Food Exbn. Associacao Industrial Portuense Oporto, Portugal. Every 5 years.

Romania

Bucharest

May 3-12. Exbn. of Industrial Equipment for Petroleum, Chemistry, Plastics & Rubber. Bucharest.

June 25-July 4. Textile Exbn. Ready-made clothes, knitwear, leather goods, and footwear.Bucharest.

Sept. 15-20. Medical Exbn. 10 rue Progresul, Bucharest.

Oct. 15-24. ★2nd Bucharest Int. Fair. Industrial equipment for metallurgy, machine tools, metal processing, power machines, energy, electrotechniques and electronics. P.O. Box 183, Bucharest. Biennial.

Senegal

Dakar

February 1973. Int. Trade Fair. Magathe Sow, Manager Trade Fair Projects, Government of Senegal, Dakar.

Somali Republic

Mogadiscio

September-October 1973. 12th Somali Int. Trade Fair. P.O. Box 27. Biennial.

Spain

NOTE: Asterisk (*) indicates that fair is open to direct participation by foreign companies; participation in all others is only through local agents of foreign companies.

Albacete

Sept. 7-15. 7th National Knife Exbn. & Knife Manufacturing Machinery. Calle Mayor s/n, Albacete. Annual.

Barcelona

Jan. 28-Feb. 4. Sports & Camping Salon. Avda. Maria Cristina s/n, Parque de Montjuich, Barcelona (4). Annual.

Feb. 6-10. 12th National Wearing Apparel Salon. 1st edition: fall and winter fashions. Avda. Jose Antonio 670, Barcelona (10). Semiannual.

Feb. 26-March 7. 10th Int. Nautical Salon. Avda. Maria Cristina s/n, Parque de Montjuich, Barcelona (4). Annual.* (DIB 71-06-406)

April 16-20. GRAPHISPACK—Int. Packaging & Crating Salon. Avda. Maria Cristina s/n, Parque de Montjuich, Barcelona (4). Annual.*

April 22-May 2. 5th Int. Automobile Salon. Avda. Maria Cristina s/n, Parque de Montjuich, Barcelona (4). Annual.* (DIB 71-07-410)

June 3-13. FOIM—40th Official & Int. General Trade Fair. Avda. Maria Cristina s/n, Parque de Montjuich, Barcelona (4). Annual.* (DIB 71-08-406)

Oct. 2-6. 12th National Wearing Apparel Salon. (2nd edition: spring and summer fashions). Avda. Jose Antonio 670, Barcelona (10). Semiannual.

Oct. 14-22. SONIMAG—10th Image, Sound & Electronic Salon. Avda. Maria Cristina s/n, Parque de Montjuich, Barcelona (4). Annual.

Nov. 16-26. HOGARHOTEL—12th National Home Decoration & Gastronomy Salon and International Hotel Equipment Exbn. Avda. Maria Cristina s/n, Barcelona (4). Annual.*

Bilbao

March 4-12. 7th Spanish Machine Tool Biennial Exbn. Tercio de Begona 2, Bilbao.

July 1-12. 7th Int. General Trade Fair. Tercio de Begona 2, Bilbao. Annual. (DIB 70-11-411)

Nov. 25-Dec. 3. Surgical Medical Salon. Tercio de Begona 2, Bilbao. Annual.

El Ferrol Del Caudillo

July 17-31. 10th National Naval Industries Fair & NW General Trade Fair. Frutos Saavedra 158, El Ferrol del Caudillo. Annual.

Elda

March 8-12. FICIA—11th Int. Shoe & Related Industries Fair. (1st edition: fall-winter fashions). Avda. Chapi s/n, Elda, Alicante. Semiannual.* (DIB 71-12-404)

Sept. 10-14. FICIA—12th Int. Shoe & Related Industries Fair. (2nd edition: spring-summer fashions). Avda. Chapi s/n, Elda, Alicante. Semiannual.* (DIB 71-05-402)

Gijon

Aug. 5-20. 16th General Trade Fair of Asturias. Instituto 17, Gijon. Annual.

Las Palmas De Gran Canaria (Canary Islands)

Feb. 1-15. Spanish Atlantic General Trade Fair. Las Palmas de Gran Canaria. Annual.

Lerida

Sept. 16-26. 9th National Agricultural & Fruit Fair of Saint Michael. Campos Eliseos s/n. Lerida. Annual.

Madrid

Jan. 12-17. IBERPIEL—3rd National Leather Goods Salon. Avda. Jose Antonio 32. Madrid (13). Annual.

May 3-15. 9th National Electrification Salon. Barquillo 17, Madrid (4). Annual.

May 13-June 5. FICIA—9th Int. Country Fair. Avda. de Portugal s/n, Madrid (11). Biennial.*

Oct. 6-15. EXPOPLASTICA—Technical Fair of Applied Chemistry. Juan de la Cierva 3, Madrid (6). Annual.

Oct. 14-29. 6th Used Automobile Market. Avda. de Portugal s/n. Madrid (11). Annual.

Nov. 10-19. SIMO—12th Int. Monographic General Trade Fair of Office Equipment & Data Processing Citema. Conde Valle de Suchil 8, Madrid (15). Annual.* (DIB 71-01-405)

Murcia

Oct. 20-30. 11th Int. Canning & Food Fair. Avda. Jose Antonio 11, Murcia. Annual.*

Palma De Mallorca

March 16-26. FOMAT—Official Samples, Craftsmanship & Tourism Fair. Excmo. Ayuntamiento, Palma de Mallorca. Annual.

Sabadell

Oct. 6-15. 7th Industrial & Commercial Fair. Delegacion Sindical Comarcal, Sabadell, Barcelona. Annual.

San Sebastian

Aug. 13-31. 9th Elegance Salon. Oquendo 18. San Sebastian. Annual.

Seville

April 15-30. 12th Iberoamerican General Trade Fair. Pabellon del Peru, Jardines de San Telmo, Seville. Annual.* (DIB 71-07-411)

Valencia

Jan. 30-Feb. 4. TEXTILHOGAR 72—3rd Monographic Fair of Textile Goods for the Home. P.O. Box 476, Valencia. Annual.

Feb. 19-27. 11th Toy & Children's Apparel Fair. P.O. Box 476, Valencia. Annual.

April 7-16. 8th Ceramics, Glass & Decoration Elements Monographic Fair. P.O. Box 476, Valencia. Annual.

April 8-17. 7th Art in Metal Monographic Fair. P.O. Box 476, Valencia. Annual.

May 6-16. 50th Int. General Trade Fair. P.O. Box 476, Valencia. Annual.* (DIB 71-08-406)

Sept. 14-17. 6th Spanish Children's Fashion Show. P.O. Box 476, Valencia. Annual.

Oct. 14-23. 9th Spanish Furniture Fair & Int. Woodworking Machinery Salon. P.O. Box 210, Valencia. Annual.*

Valladolid

Sept. 12-24. 8th Regional Trade Fair of Castille & Leon. Avda. Ramon Pradera s/n, Valladolid. Annual.

Zaragoza

April 8-16. FIMA 72—6th Int. Farm Machinery Fair. Gran Via s/n, Zaragoza. Annual.* (DIB 71-06-407)

Oct. 3-15. 32nd Official & National General Trade Fair. Gran Via s/n, Zaragoza. Annual.

Swaziland

Manzini

September. Swaziland Show. Swaziland Show (Pty.) Ltd. Eriksen Ford Centre, P.O. Box 462, Mbabane.

Sweden

Engelholm

May 11-14. 4th Scandinavian Aviation Exbn. Helsingborgs Exbns. Ltd., Hamntorget, S-252 21 Helsingborg.

Goteborg

Feb. 18-27. Swedish Int. Boat Show. AB Svenska Batutstallningen, Erik Dahlbergsgatan 3, S-411 26 Goteborg.

March 14-19. INREDNING 72—Office and Shop Fittings & Equipment Int. Trade Fair. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

March 14-19. Building, Housing, & Environmental Exbn. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

April 7-11. MARITIME—Sea Transport Exbn. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

May 5-14. 55th Int. Swedish Trade Fair. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

Sept. 9-17. Household of Today Exbn. Goteborgs Kopmannaforbund, Box 53200, S-400 15 Goteborg.

Oct. 2-6. INTERREST 72—4th Int. Catering Fair. Sveriges Hotell & Restaurangutstallningar AB, Box 4034, S-411 01 Goteborg.

Oct. 17-23. CONTACT 72—Techniques and systems for communications AV, reproduction, printing, telecommunications, electronics, and documentation. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

Oct. 19-25. SCANCORR 72—Corrosion & Surface Protection Exbn. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

Nov. 9-15. SCANPLAST 72—Machinery & Equipment for the Plastics Industry. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

Nov. 28-Dec. 3. KOMMUN 72—Specialized Trade Fair for Public Works & Municipal Services. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

Nov. 28-Dec. 3. SCAN AUTOMATIC 72—Hydraulics, Pneumatics, Automation & Electronics Show. Svenska Massan, Skanegatan 26, S-412 51 Goteborg.

Helsingborg

July 3-16. SKALA 72—Int. Agricultural Fair. Helsingborgs Exhibitions Ltd., Hamntorget, S-252 21 Helsingborg.

July 29-Aug. 6. ANTIK 72—Int. Art & Antique Fair. Helsingborgs Exhibitions Ltd., Hamntorget, S-252 21 Helsingborg.

Jonkoping

June 8-13. ELMIA 72—Agricultural Fair. ELMIA, Box 6066, S-550 06 Jonkoping 6.

Aug. 28-Sept. 3. WORLD, WATER & WE—Int. Water Conservancy Exbn. ELMIA, Box 6066, S-550 06 Jonkoping 6.

Malmo

Jan. 22-30. BOAT & HOBBY—Int. Boat Show. AB Malmo Batutstallning, Stjarnplan 3, S-216 18 Malmo.

Feb. 12-20. MOTOR 72—Sport Cars & Equipment. Sydexpo AB, Stjarnplan 3, S-216 18 Malmo.

April 21-25. MEKANIK 72—Int. Mechanics Fair. Stiftelsen Skanemassan, Box 19015, S-200 73 Malmo 19.

May 5-8. INTERVISA—Int. Fair for Audiovisual Aids & Systems. Stiftelsen Skanemassan, Box 19015, S-200 73 Malmo 19.

May 30-June 2. ISIMA 72—Int. Hospital Exbn. Stiftelsen Skanemassan, Box 19015, S-200 73 Malmo 19.

Aug. 18-27. 54th Int. Skane Trade Fair. Stiftelsen Skanemassan, Box 19015, S-200 73 Malmo 19.

Aug. 18-27. BYGG-MA—Int. Construction Industry Fair. Stiftelsen Skanemassan, Box 19015, S-200 73 Malmo 19.

Sept. 18-20. Int. Shoe Fair. Sko-Leverantorernas Forening, Box 1753, S-111 87 Stockholm.

Oct. 11-15. RATIONAL OFFICES—Office Equipment Fair. Sydexpo AB, Stjarnplan 3, S-216 18 Malmo.

Stockholm

For all Stockholm fairs listed, address: AB St. Eriks-Massan, S-106 80 Stockholm.

Feb. 3-6. Swedish Furniture Fair.

March 1-12. ALLT FOR SJON—Int. Boat Show.

March 19-22. FOREST WEEK—Forest Exbn.

March 20-22. Int. Shoe Fair.

April 13-18. Heating, Water & Sanitation Fair.

April 25-28. Swedish Paper & Cellulose Industry Fair.

Sept. 1-10. St. Erik's Fair. Food, housekeeping, home furnishings, textiles, sporting and camping equipment, caravans, trade and tourist information, handicrafts.

Oct. 2-7. IM 72—Instruments & Measurements Show.

Oct. 19-25. Stockholm Technical Fair.

Sundsvall

April 12-16. International Boat Show. Norrlandska Industrimassan AB, Storgatan 30, S-902 44 Umea.

Umea

Aug. 3-13. NOLIA—Industrial Fair. Norrlandska Industrimassan AB, Storgatan 30, S-902 44 Umea.

Switzerland

For Basel fairs listed, unless otherwise indicated, address: Sekretariat, Schweizer Mustermesse, 4000 Basel 21.

Basel

Feb. 3-12. IFM 72—Third Int. Fair for Mechanical Handling. Quadrennial. (DIB 71-04-409)

March 9-19. KAM—Art & Antiques Fair. Annual.

May 30-June 3. Int. Wire Exbn. Mac Brooks Exbns. Ltd., 96 Hatton Gardens, London, E.C. 1.

June 6-10. SWISSPACK 72—Second Int. Packaging Exbn. Biennial.

Sept. 3-5. INTERFEREX 72—Seventh Int. Trade Fair for Hardware, Tools & Household Appliances. Biennial.

Sept. 6-12. SURFACE 72—Third Int. Surface Treatment Exbn. Triennial.

Sept. 23-Oct. 1. HITFAIR—Fashions, Clothes, Entertainment for Young People. Annual.

Oct. 16-21. NUCLEX 72—Third Int. Fair for Nuclear Industries. Triennial.

Bern

Sept. 3-6. SPISO—Fair for Toys, Souvenirs & Costume Jewelry. Genossenschaft Spiso, Monbijoustrasse 14, 3011 Bern. Annual.

Geneva

Jan. 29-Feb. 6. Int. Exbn. for Utility Vehicles & Accessories. Salon de l' Automobile, 18 Quai de l' Ecole-de-Medecine, 1211 Geneva. Biennial.

March 9-19. Int. Motor Show. Salon de l' Automobile, 18 Quai de l' Ecole-de-Medecine, 1211 Geneva. Annual.

April 25-29. WORLD TOBACCO—Exbn. of Modern Cigarette & Cigar Manufacturing Techniques & Equipment. Palais des Expositions, 18 Quai de l' Ecole-de-Medecine, 1211 Geneva.

May. MEDICA 72—Int. Exbn. for Medical & Hospital Equipment & Supplies. Palais des Expositions, 18 Quai de l' Ecole-de-Medecine, 1211 Geneva. Usually, biennial.

June 19-23. Int. Exbn. for Airport Construction Machinery & Airport Installations & Equipment. Palais des Expositions, 18 Quai de l'Ecole-de-Medecine, 1211 Geneva. Every ten years.

September. Int. Electro-Optical Equipment Show. Palais des Expositions, 18 Quai de l' Ecole-de-Medecine, 1211 Geneva.

Oct. 25-Nov. 11. Home Appliances Exbn. Palais des Expositions. 16bis Quai de l' Ecole-de-Medecine, 1211 Geneva. Annual.

November. International Inventors Fair. Palais des Expositions, 18 Quai de l'Ecole-de-Medecine, 1211 Geneva.

Lausanne

Feb. 26-March 5. Int. Exbn. for Tourism & Travel. Mr. Kundert, 2 ave. Agassiz, 1000 Lausanne. Annual.

April 19-22. Technical & Scientific Exbn. & Int. Symposium on Prenatal Medical Care. Dr. H. Bossart, Hospital Cantonal, 1000 Lausanne.

St. Gallen

Sept. 1-4. INTERMOBEL 72—Int. Furniture Fair. Intexpo, Museumstrasse 1, 9004 St. Gallen. Biennial.

Zurich

Feb. 5-13. Swiss Boat Show. Boats, motors, accessories. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Annual.

Feb. 21-23. Men's Fashionable Wear. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Annual.

March 2-7. ANTRIEBSTECHNIK 72—Exbn. for Prime Movers & Drive Techniques. Agifa GmbH, Universitatsstrasse 120, 8033 Zurich. Triennial.

March 5-6. Int. Shoe Exbn. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Semiannual.

March 17-25. HILSA 72—Int. Trade Fair for Heating & Air Conditioning. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Triennial.

April 16-18. Fashions for Women & Children. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Semiannual.

April 27-May 1. Int. Exbn. for Gymnasium & Swimming Pool Construction, Equipment & Accessories. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Biennial.

June 1-6. Industrial Handling—Trade Fair for Automation in Industry. Agifa GmbH, Universitatstrasse 120, 8033 Zurich. First show of this kind; probably biennial.

Sept. 3-4. Int. Shoe Exbn. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Semiannual.

Sept. 13-16. TANK 72—Trade Fair for Tank Construction & Tank Protection. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Biennial.

Sept. 21-Oct. 1. ZUSPA 23—Zurich Autumn Show of Consumer Durables & Consumer Goods. Emphasis on household appliances, foodstuffs, clothing, leisure wear, sporting goods. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Annual.

Oct. 8-10. Fashions for Women & Children. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Semiannual.

Oct. 18-22. IFAS 72—Int. Exbn. for Medical & Hospital Equipment & Supplies. Zuspa, Thurgauerstrasse 7, 8050 Zurich. Biennial.

Nov. 13-18. Hydraulics & Pneumatics Show. Sixth international exbn. for hydraulic pumps, motors, cylinders, actuators, valves, assemblies, variable speed drive units, flow lines, connections, packings, lubrication systems, pressure intensifiers, hydraulic fluids, accessories. Agifa GmbH, Universitatstrasse 120, 8033 Zurich. Biennial. (DIB 71-01-404)

Syria

Damascus

Aug. 25-Sept. 20. Damascus Int. Trade Fair. 67 Blvd. de Baghdad. Annual.

Taiwan

Taipei

Oct.-Nov. ★U.S. Solo Exbn.: Equipment for Business and Industry. J. David Anderson, Export Plans Officer, Southeast Asia/OITP (958), U.S. Department of Commerce, Washington, D.C. 20230.

Tanzania

Dar es Salaam

July 1-7. Saba Saba Int. Trade Fair. Principal Secretary, Ministry of Commerce and Industries, P.O. Box 234. Annual.

Thailand

Bangkok

June. ★Building Products & Construction Equipment Exbn. U.S. Regional Trade Development Center, Bangkok. T. R. Padgett, Export Plans Officer, Southeast Asia/OITP, BIC-958, U.S. Department of Commerce, Washington, D.C. 20230.

Tunisia

Tunis

May-June 1973. Tunis Int. Trade Fair. Direction de la Foire Internationale de Tunis, Esplanade Mohamed V.

Turkey

Izmir

Aug. 20-Sept. 20. ★Izmir Int. Trade Fair. Directorate, Izmir Fairs and Tourism. Annual.

United Kingdom

Bath

May 15-19. Medical Records Educational Conference & Exbn. Deputy Group Medical Records Officer, Bristol Royal Infirmary, Bristol.

Birmingham

Feb. 12-26. Boat & Leisure Life Exbn. Birmingham Boat Shows Ltd., 28 Colmore Circus, Birmingham 4.

March 7-11. Midland Packaging & Plastics Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3 FD.

Blackpool

Jan. 16-19. Int. Slipper Fair. Shoe and Leather News (Exbns.) Ltd., 84/88 Great Eastern St., London E.C.2.

Jan. 30- Feb. 3. Int. Gifts Fair. Trade Promotion Services Ltd., 185/187 High Road Chadwell Heath, Romford, Essex.

Sept. 19-21. Environmental Health Exbn. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London, WIN 6 NH.

Bournemouth

Jan. 16-20. South Coast Gifts Fair. Lew Barclay & Co. Ltd., 46 Towngate St., Poole, Dorset.

Feb. 29-March 2. South Coast Licensed & Allied Trades Fair. Lawson Organisation, Green Dragon House, 64 High St., Croydon, CR9 2UH.

Brighton

Jan. 1-8. Southern Racing Car Show. Racing Car Shows Ltd., 347 Goswell Rd., London, ECIV 7JR.

Jan. 29-Feb. 2. British Int. Toy Fair. British Toy Fairs (Int.) Ltd., Regent House, 89 Kingsway, London, W.C.2.

Feb. 16-26. Home Life Exbn.

March 20-24. Int. Oceanological Equipment & Services Exbn. BPS Exhibitions Ltd., 4 Seaford Ct., 220-222 Great Portland St., London, WIN 5HH.

May 15-19. RUBBEREX—Int. Rubber Conference & Exbn.—Maclaren (Exhibitions) Ltd., Davis House 69/77 High St., Croydon, Surrey.

May 22-26. Public Cleansing Conference & Exbn. Institute of Public Cleansing, 28 Portland Place, London, W.1.

June 13-15. COMMUNICATION 72—Radio & Data Exbn.—Gordon Saville E.T.V. Cybernetics Ltd., 21 Victoria Rd., Surbiton, Surrey.

July 14-22. Antiques Fair. Cultural Exhibitions Ltd., 137 Blenheim Crescent, London, W.11.

Sept. 16-23. Int. Trade Fair. Lawson Organisation, Green Dragon House, 64 High St., Croydon, CR9 2UH.

Oct. 31-Nov. 3. National Housing & Farm Planning Exbn. & Conference. Lawson Organisation, Green Dragon House, 64 High St., Croydon, CR9 2UH.

Nov. 20-24. Southern Hotel & Licence Victuallers & Industrial Catering Exbn. Trades Exhibitions Ltd., Exbn. House, Spring St., London, W.2.

Builth Wells

July 25-27. Royal Welsh Show. J. A. George, Royal Welsh Agricultural Society Llanelwedd, Builth Wells, Rads.

Bury St. Edmunds

Aug. 26-Sept. 2. Do-It-Yourself Exbn. Inter-Continental Exhibitions, 68 North Rd., P.O. Box 303, Brighton, BNI 1YQ.

Buxton

April 22-29. Antiques Fair. Cultural Exhibitions Ltd., 137 Blenheim Crescent, London, W.11.

Cardiff

Feb. 22-24. Welsh Printing Show. Conferences & Trade Shows Ltd., 1 Queen Square Brighton, BNI 3FD.

Feb. 29-March 2. Welsh Materials & Mechanical Handling Exbn. Conferences & Trade Shows Ltd., 1 Queen Square, Brighton, BNI 3FB.

March 14-16. Welsh Laboratory & Scientific Instrument Show. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

April 3-8. Welsh Boat, Camping & Caravan Show. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

May 19-June 3. Ideal Home Exbn. Exhibitions (Wales & West) Ltd., Holly House Rhiwderin, Newport, Mon.

Eastbourne

April 24-28. District Council Surveyor's Exbn. (c/o The Royal Society of Health) 90 Buckingham Palace Rd., London, S.W.1.

April 24-28. Health Exbn. Royal Society of Health, 90 Buckingham Palace Rd., London, S.W.1.

Sept. 26-28. Fire Fighting & Prevention Exbn. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London, WIN 6NH.

Edinburgh

March 9-11. Scottish Contract Interiors Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

April 26-May 13. "Evening News" Ideal Home Exbn. Herbert Daniel (Holdings) Ltd., 19 Compton Terrace, London, N.1.

May 30-June 2. Scottish Light Engineering Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

June 13-16. Scottish Laundry & Dry Cleaning Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

June 27-30. Scottish Water, Air & Waste Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

Oct. 16-19. Scottish Food Packaging Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

Glasgow

Feb. 25-March 5. Scottish Caravan & Mobile Holidays Exbn. Ian McBride Promotions Ltd., 16/17 Bride Lane Fleet St., London, EC4Y 8EB.

March 21-24. Scottish Building & Public Works Exbn.

April 6-7. Int. Conference & Exbn. On Audio-Visual Media In Education & Industry. National Committee for Audio-Visual Aids in Education, 33 Queen Anne St., London, Wim Oal.

April 12-22. Scotland's Food Exbn. Scottish Trades Markets & Exhibitions Ltd., City Hall, Deansgate, Manchester 3.

Harrogate

Jan. 8-13. Int. Toy Fair. Harrogate International Toy Fair Ltd., Finsbury Ct., Finsbury Pavement, London, E.C.2.

Feb. 1-3. Electric Living Trade Fair. Electricity Council Marketing Department, Trafalgar Buildings, 1 Charing Cross, London, S.W.1.

Feb. 14-17. Int. Exbn. & Conference Of Textile Accessories, Control, Equipment & Techniques. Conference & Trade Shows Ltd., 1 Queen Square, Brighton, BNI 3FD.

March 7-9. Electronics Equipment & Components Design (Northern) Exbn. Batiste Publications Ltd., Drummond House, 203/209 North Gower St., London N.W.1.

May 3-5. Int. Safety Study Trade Exbn. Royal Society for the Prevention of Accidents, 52 Grosvenor Gardens, London, S.W.1.

May 12-14. PHOTO 72.—Int. Exbn. Of Photographic Equipment. Exhibition and Conference Services Ltd., Claremont House, Victoria Ave., Harrogate.

July 11-13. Great Yorkshire Agricultural Show. Yorkshire Agricultural Society Shipton Road, York, YO3 6RA.

Sept. 5-8. Northern Floor Covering Fair. Industrial & Trade Fairs Ltd., Commonwealth House, 1/19 New Oxford St., London WC1A 1PB.

Sept. 13-15. Northern Materials & Mechanical Handling Show. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

Keele

Sept. 20-22. Automatic Test Systems Exbn. & Conference. Electronic Engineering Association, Leicester House, 8 Leicester St., London, WC2H 7BN.

Leeds

Feb. 16-26. Caravan & Camping Exbn. Queens Hall Exhibitions Ltd., Queens Hall, Leeds, LS1 4AJ.

March 7-9. Engineering Industries Association Regional Exbn. Secretary, Engineering Industries Association, 7 Park Square, Leeds 1.

March 21-24. NORTHPRINT—Northern Printing Exbn. Marketing Exhibitions Ltd., 25 Oakhill Road, London, S.W. 15.

June 27-29. Electronics Exbn. Electrical & Electronic Engineering Dept., University of Leeds. Leeds LS2 9JT.

Leicester

May 22-26. Industrial Sewing Equipment Exbn. U.T.P. Exhibitions Ltd., 36/37 Furnival St., London EC4A 1JH.

Oct. 10-13. MIDPRINT—Midland Printing Exbn. Marketing Exhibitions Ltd., 25 Oakhill Road, London, S.W. 15.

London

Jan. 1-8. Racing & Sporting Motor Cycle Show. Herbert Daniel (Holdings) Ltd., 19 Compton Terrace, London, N. 1.

Jan. 4-6. Infofair & Conference. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London, W1N 6 NH.

Jan. 4-15. Int. Boat Show. National Boat Shows Ltd., 31 Gt. Queen St., London, W.C. 2 (DIB 71-02-401).

Jan. 6-14. Int. Hotel & Catering Exbn. ITF-Lliffe Exhibitions Ltd., Commonwealth House, New Oxford St., London, WC1A 1PB.

Jan. 9-12. Intershop National Display Equipment Assn. Exbn. National Display Equipment Assn., Lennig House, Mason's Ave., Croydon, CR 9 3LL.

Jan. 16-20. Leathergoods, Luggage & Handbag Fair. British Leather Goods Manufacturers Assn., 9 St. Thomas St., London, S.E. 1.

Jan. 24-28. Int. Hardware Trade Fair. Universal Exhibitions Ltd., P.O. Box 43, High Wycombe, Bucks.

Jan. 25-27. Amusement Trades Exbn. Amusement Trades Exhibitions Ltd., 19 Charing Cross Rd., London, W.C. 2.

Jan. 26-Feb. 5. Camping, Outdoor Holiday & Travel Exbn. Trades Exhibitions Ltd., Exhibition House, Spring St., London, W. 2.

Feb. 6-11. Lightshow Lighting Exbn. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London, W1N 6 NH.

Feb. 6-12. Int. Furniture Show. R. W. Boardman (Exhibitions) Ltd., 8 Leicester St., Leicester Square, London W.C.2.

Feb. 21-23. British Glove Fair. Glove Guild of Great Britain, 9 St. Thomas St., London, S.E.1.

Feb. 22-24. WALPADEX—Decorating Materials Trade Show. Mr. S. M. Broughton, Wallpaper and Paint Retailers Assn., 27 Lichfield St., Walsall, Staffs.

Feb. 28-March 3. CARPEX—Int. Carpet, Linoleum & Floor Coverings Fair. Industrial and Trade Fairs Ltd., Commonwealth Ho., 1/19 New Oxford St., London WC1A 1PB.

Feb. 28-March 3. IMBEX—Int. Men's & Boys' Wear Exbn. Industrial and Trade Fairs Ltd., Commonwealth Ho., 1/19 New Oxford St., London WC1A 1PB.

March 13-16. Physics Exbn. Institute of Physics, 47 Belgrave Square, London, S.W.1.

March 14-16. SOUND 72—Public Address Equipment Exbn. Assn. of Public Address Engineers, 394 Northolt Rd., South Harrow, Mddx.

March 19-22. Autumn Shoes Exbn. Shoe and Leather News (Exhibitions) Ltd., 84-88 Great Eastern St., London, E.C.2.

March 21-23. ALTEX—Automatic Laboratory Techniques Exbn. Gerard Mann (Altex) Ltd., 1/3 Astoria Parade, Streatham High Rd., London S.W. 16.

March 21-24. NORTHPRINT—Northern Printing Exbn. Marketing Exhibitions Ltd., 25 Oakhill Rd., London, S.W. 15.

March 22-29. ELETREX—Int. Electrical Engineers (A.S.E.E.) Exbn. Electrical Engineers (A.S.E.E.) Exhibition Ltd., Wix Hill House, West Horsley, Surrey.

April 6-9. STATINDEX—Stationery Industry Exbn. British Stationery and Office Equipment Assn., 6 Wimpole St., London, W.1.

April 7-9. British Small Animal Veterinary Assn. Congress & Trade Exbn. R. Green, B. Vet. Med. M.R.C. V.S., 7 Queens Rd., Haywards Heath, Sussex.

April 10-13. Incentive Marketing & Premium Exbn. Distinctive Exhibitions Ltd., P.O. Box No. 109, Davis House, 69-77 High St., Croydon, CR9 1QH.

April 17-21. Int. Brewing, Bottling & Allied Trades Exbn. Trades Markets and Exhibitions Ltd., Commonwealth House, New Oxford St., London, W.C.1.

April 17-21. Int. Heating, Ventilation & Air Conditioning Exbn. Industrial Exhibitions Ltd., 9 Argyll St., London, W1V 2HA.

April 17-24. OCCA—Technical Exbn. Oil and Colour Chemists' Assn., Wax Chandlers' Hall, Gresham St., London, EC2V 7AB.

April 18-21. Transportation Engineering Exbn. Traffic Engineering and Control, 26/30 Holborn Viaduct, London EC1A 2BP.

April 24-27. Children's & Teenage Fashion Fair. Teenage, Infants' and Girls' Fashion Fair Organization, 81 Wimpole St., London, W1M, 7DB.

April 24-27. Junior Fashion Fair (Spring). National Children's Wear Assn., 40/42 Oxford St., London, W.1.

April 24-27. Int. Security Exbn. & Conference. Victor Green Publications Ltd., 44 Bedford Row, London, WC1R 4BR.

May 8-12. Int. Instruments, Electronics & Automation Exbn. Industrial Exhibitions Ltd., 9 Argyll St., London, W1V 2HA.

May 9-19. Int. Mechanical Handling Exbn. ITF-Lliffe Exhibitions Ltd., Commonwealth House, New Oxford St., London, WC1A 1PB.

May 21-25. London Television & Radio Trade Shows. British Radio Equipment Manufacturers Assn., 20th Century House, 31 Soho Square.

May 23-26. Int. Contract Furnishing & Interior Design Exbn. Westbourne Exhibitions Ltd., Crown House London Rd., Morden, Surrey.

May 24-June 3. Boat Afloat Show. British Waterways Board, Melbury House, Melbury Terrace, London, NW1 61X.

June 5-8. Effluent & Water Treatment Exbn. & Convention. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London, W1N 6NH.

June 5-8. ENPOCON—Environmental Pollution Control Exbn. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London, W1N 6NH.

June 6-8. Footwear Materials & Components Exbn. Shoe and Leather News (Exhibitions) Ltd., 84-88 Great Eastern St., London, E.C.2.

June 6-8. Leather Expo. Leather Insti-

U.S. EXHIBITIONS ABROAD—*Among the 1,000 international trade fairs listed in this issue and preceding one are several so-called solo exhibitions scheduled by the Commerce Department for participation by U.S. firms only. An interesting aspect of a recent solo, Expo USA 71 in Sao Paulo, was that the Illinois Department of Business and Economic Development helped recruit 31 companies within the State. They project immediate and 12-month sales as a result of their participation at almost $7 million. Lockformer (above), new to the market, was among the Illinois exhibitors.*

tute, Leather Trade House, 9 St. Thomas St., London, S.E.1.

June 6-9. Industrial Finishing & Anti-Corrosion Exbn. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London, W1N 6NH.

June 6-9. Int. Hospital & Health Services Exbn. Contemporary Exhibitions Ltd., 21 Park Square East Regent's Park, London, N.W.1.

June 13-16. FASEX & PLASTEX—Engineering Design Show. Business Conferences and Exhibitions Ltd., Mercury House, Waterloo Rd., London, S.E.1.

June 19-23. Fluid Power Int. Exbn. & Conference. Commercial Exhibitions and Publications Ltd., Riverside House, Hough St., Woolwich, London SE18 6LR.

June 20-23. Microforum Int. Exbn. Business Equipment Trade Assn., 109 Kingsway, London.

June 21-July 1. Int. Machine Tool Exbn. Machine Tool Trade Assn. Ltd., 62 Bayswater Rd., London.

June 23-24. Assn. of Professional Recording Studios. Exbn. Assn. of Professional Recording Studios, 3 Strathray Gardens, London N.W.3.

June 26-29. WINEX—Int. Wine Marketing Exbn. Explanor Ltd., 23 Thackeray St., Kensington, London W8.

July 4-6. Bio-Medical Exbn. & Symposium. U.T.P. Exhibitions Ltd., 36/37 Furnival St., London, E.C.4.

July 24-27. Int. Audio-Visual Aids Conference & Exbn. National Committee for Audio Visual Aids in Education, 33 Queen Anne's St., London, W.1.

Aug. 18-25. Int. Mining Exbn. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London W1N 6NH.

Sept. 4-7. Industrial & Commercial Security Exbn. Exhibition Managements Ltd., 50 Rochester Row, London S.W.1.

Sept. 5-7. Int. Corsetry, Lingerie & Swimwear Exbn. Exhibition Managements Ltd., 50 Rochester Row, London, S.W.1.

Sept. 5-7. Int. Poultry Show. ITF-Lliffe Exhibitions Ltd., Commonwealth House, New Oxford St., London, WC1.

Sept. 5-7. Meat Industry Exbn. ITF-Lliffe Exhibitions Ltd., Commonwealth House, New Oxford St., London, WC1A 1PB.

Sept. 5-8. Int. Diecasting Exbn. Mack-Brooks Exhibitions Ltd., 7 London Rd., St. Albans, Herts.

Sept. 5-9. Woodworking Equipment & Materials Show. Westbourne Exhibitions Ltd., Crown House, Morden, Surrey.

Sept. 18-22. Int. Chemical & Petroleum Engineering Exbn. Industrial and Trade Fairs Ltd., Commonwealth House, 1-19 New Oxford St., London W.C.1.

Sept. 22-30. Int. Commercial Motor Transport Exbn. Society of Motor Manufacturers and Traders Ltd., 21/24 Grosvenor Place, London, S.W.1.

Sept. 26-29. INTERCLEAN—Int. Cleaning & Maintenance Exbn. Exhibition Promotions (MH) Ltd., Stamford House, 65-66 Turnmill St., London, EC1M 5RA.

Sept. 26-29. Int. Feed-Milling & Livestock Management Exbn. Exhibition Promotions (MH) Ltd., 65-66 Turnmill St., London, E.C.1.

Oct. 2-6. London Bakers Exbn. National Assn. of Master Bakers, Confectioners and Cateries, Queens Hall, Holly Road, Twickenham, Middx.

Oct. 9-13. PAKEX—Int. Packaging Exbn. Industrial and Trade Fairs Ltd., Commonwealth House, New Oxford St., London, W.C.1. (DIB 70-08-412).

Oct. 9-13. Furniture Production Exbn. Exhibitions for Industry Ltd., 157 Station Rd., East, Oxted, Surrey.

Oct. 16-19. Children's & Teenage Fashion Fair. Teenage, Infants' and Girls' Fashion Fair Organization, 81 Wimpole St., London, W1M 7DB.

Oct. 18-28. Int. Motor Exbn. Society of Motor Manufacturers and Traders Ltd., Forbes House, Halkin St., London, S.W.1.

Nov. 12-15. Camping & Sports Equipment Trade Fair. Trades Exhibitions Ltd., Exhibition House, Spring St., London, W.2.

Nov. 13-18. Public Works & Municipal Services Congress & Exbn. Brintex Exhibitions Ltd., 178-202 Gt. Portland St., London, W1N 6NH (DIB 71-04-401).

Dec. 4-8. COMPUTERS—Int. Computer & Peripheral Exbn. Business Equipment Trade Assn., 109 Kingsway, London, W.C.2.

Manchester

Feb. 7-11. Clean Air & Antipollution Exbn. Clean Air & Antipollution Exhibitions Ltd., 12 York Way, London, NI 9AA.

March 3-12. Boat Show. Trade Exhibitions Ltd., Exhibition House, Spring St., London, W.2.

March 3-12. Northern Racing & Performance Car Show. Trade Exhibitions Ltd., Exhibition House, Spring St., London, W.2.

April 11-14. Int. Exbn. of Spring Making Equipment & Materials Exbn. The Law Organisation, Green Dragon House, 64 High St., Croydon CR9 2UH.

May 15-19. Northern Reprographic Exbn. Provincial Exhibitions Ltd., City Hall, Deansgate, Manchester 3.

May 23-26. Int. Industrial Training Exbn. & Symposium. Press Representations Ltd., 44 Brazennose St., Manchester M2 5AP.

June 5-9. Licensed Victuallers Int. Trade & Catering Exbn. Morning Advertiser, 18-20 St. Andrew St., London, E.C. 4.

Sept. 5-16. Northern Food Fair Grocers Exbn. Grocers & Allied Trades Exbn. 393 Corn Exchange, Manchester 4.

Norwich

Jan. 29-Feb. 5. Eastern Counties Boat, Camping & Caravan Show. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3 FD.

June 28-29. Royal Norfolk Agricultural Show. Royal Norfolk Agricultural Society Showground, Dereham Rd., Costessey, Norwich NOR 45J.

Dec. 6-8. Eastern Counties Printing Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

Southampton

Feb. 1-3. Southern Printing Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

Feb. 29-March 2. Southern Electronics Exbn. Conference & Trade Shows Ltd., 1 Queens Square, Brighton, BNI 3FD.

April 25-28. CADEX 72—Computer-Aided Design Exbn. Electronic Engineering Assn., 8 Leicester St., London WC2H 7BN.

Uxbridge

Sept. 4-7. ONLINE—Int. Symposium & Exbn. Of Onlone Interactive Computing. Onlone (Computer Systems) Ltd., Brunel University, Uxbridge, Middx.

USSR

For ali USSR fairs listed, address: Foreign Exhibitions in the USSR, Sokolnicheski Val, 1-A, Moscow, 107 232.

Kiev

May 30-June 14. PRODINDUSTRIA 72—Equipment for the baking, confectionary and canning industries, mechanization of technological processes in the food industry and packaging equipment.

Sept. 20-Oct. 1. SPORT 72 — Equipment and articles for sport and tourist purposes and amateur fishing; portable instruments used for investigations and for medical, biological and pedagogical control, in relation to sports.

Leningrad

June-July. Modern Electrotechnical Equipment. Turbo-generators, big power machines, electrowelding equipment, electroceramics, domestic electric machines and instruments.

Aug. 29-Sept. 15. CONTAINER 72—Modern means and equipment for container transportation.

Minsk

June 27-July 6. SPECTR 72—Spectroscopic Research Instruments. Quantum-electronics instruments, radioelectronic equipment, instruments for automatic processing of physical experimental results, instruments for physical-chemical analysis.

Moscow

Jan. 26-Feb. 5. KRASITELI 72—Laboratory equipment for testing dyes, pigments, optical bleaches and auxiliary substances for the textile industry.

April 4-16. IGRUSHKA 72—Equipment for manufacturing of toys and auxiliary materials and accessories.

May 16-28. METIZY 72—Equipment and instruments for production of metallic articles by cold forming and stamping.

May-June. 2nd Int. Exbn. of Building & Road-Making Machinery & Equipment For Mechanization Of Construction & Erection.

July 12-26. ELEKTRO 72—Electrical power generation, transmission systems, electrical equipment & components.

August-September. 2nd Int. Exbn. of Modern Agricultural Machinery, Equipment & Instruments.

Sept. 5-17. INTERIMPULS 72—Scientific Instruments and equipment for the recording of short-term processes.

Oct. 16-25. MEHPROM 72—Equipment for sheepskin and fur coat industry.

Nov. 29-Dec. 12. OPTICA 72—Scientific Instruments and apparatus used in optical mechanics.

Venezuela

Caracas

Oct. 24-28. ★U.S. Solo: Business Equipment. OITP, Porter Clary, Export Plans Officer, BIC-960, U.S. Department of Commerce, Washington, D.C. 20230.

Maracaibo

November. Agricultural & Industrial Fair. Maracaibo, Zulia State. Annual.

Maracay

April. San Jose Agricultural & Industrial Fair. Maracay, Aragua State. Annual.

Valencia

Spring. Livestock & Industrial Exposition. Annual.

Yugoslavia

For all Belgrade fairs listed, address: Beogradski Sajam, Bulevar Vojvode Misica 14, 11001 Belgrade.

Belgrade

March 13-17. 6th Int. Show of Textiles & Shoes.

April 14-23. 11th Int. Fair of Engines & Motor Vehicles.

May 12-21. 16th Int. Technical Fair.

Oct. 6-15. 13th Int. Clothing Fair—"Fashions in the World."

Oct. 27-Nov. 5. 10th Int. Show of Furniture Accessories & Interior Decoration (combined with 3rd Yugoslav furniture show).

Nov. 14-18. 17th Int. Book Fair.

Nov. 14-18. 7th Int. Chemical Industries Fair.

Nov. 15-21. Int. Exbn. of Modern Educational Aids & Equipment.

Leskovac

June 18-25. 20th Int. Fair of Textiles & Textile Machinery. Koste Stamenkovica 5, Leskovac.

Ljubljana

For all Ljubljana fairs listed, address: Gospodarsko Razstavisce, Titova Cesta 50, Ljubljana.

Jan. 15-22. MODA 72—Fashion Show. Ready-made clothing, fabrics, knitwear, leather goods.

March 25-April 1. JUTRO—Third Int. Trade & Catering Equipment Show. Packaging, transport, and warehouse equipment also will be shown.

May 13-21. 11th Annual ALPE-ADRIA Fair.

May 30-June 1. SETEX 72—Show of Textile Samples & Trim for the Clothing Industry.

June 10-17. 10th Int. Wood Fair.

Aug. 26-Sept. 3. 18th Int. Fair of Wines, Liquors & Related Equipment.

Aug. 26-Sept. 3. Exhibit of Catering & Tourist Industry Equipment.

Sept. 20-24. HORTICULTURE 72—Flower & Fruit Fair.

Oct. 10-14. Contemporary Electronics. Int. exhibition of electronics, telecommunications, automation & nuclear technology.

Dec. 3-8. Ski & Winter Sport Fair.

Novi Sad

For all Novi Sad fairs listed, address: Novdsadski Sajam, Hajduk Veljkova 11, Novi Sad.

May 12-22. 39th Annual Int. Agriculture Fair.

June 10-18. 4th Int. Exbn. of Equipment for Hunting, Fishing & Sport.

Sept. 1-6. 9th Int. Fruit & Vegetable Fair.

Sarajevo

For all Sarajevo fairs listed, address: Skenderija, M. Sokoloirca bb., Sarajevo bb.

May 12-21. 30th Int. Tourism & Sport Fair.

Oct. 14-23. 30th Int. Fair of Liquors & Non-Alcoholic Beverages.

Nov. 17-23. Plastic Products Fair.

Zagreb

For all Zagreb fairs listed, address: Zagrebacki Velesajam, Aleja Borisa Kidrica 2, 41021 Zagreb.

Feb. 22-26. 21st Int. Exhibit of Leather & Footwear.

April 17-23. Zagreb Int. Spring Fair, including the following special exbns. (DIB 71-06-410): ★U.S. Exbn. of Air Conditioning, Refrigeration, Food Processing, Packaging & Related Equipment; PLASTIPAK—3rd Int. Fair of Plastics & Packaging; JUREMA—17th International Exhibit of Measuring & Regulating Instruments; INTERPROTEX—2nd Int. Exhibit of Civil Defense Equipment; 6th Int. Building & Construction Fair; 4th Int. Mining Fair; Food Fair; Fashion Fair; Crafts Fair; Int. Consumer Goods Fair.

May 23-27. Int. Fair of Welding Techniques & METALPROTEXT.—Int. Fair for Protection of Metal Surfaces.

Sept. 7-17. Zagreb Int. Fall Fair (DIB 71-01-408)

Oct. 24-28. INTERBIRO 72—4th Int. Exbn. of Data Processing Systems & Office Equipment.

Nov. 14-18. TU-EX—Int. Exbn. of Tourist & Catering Equipment.

Nov. 14-18. SPORTEX—Int. Exbn. of Sports & Recreation Equipment.

November-December. INTERNAUTIKA—Int. Nautical Exbn.

Dec. 6-8. KUTEX—Textile Purchases and Sales Meetings.

Zaire, Rep. of

Kinshasa

Summer 1973. 3rd Kinshasa Int. Fair. Commissaire General, Foire Internationale de Kinshasa, BP 1397 Kinshasa 1, Republic of the Zaire.

Zambia

Kitwe

June 2-4. 15th Annual Agricultural, Industrial & Mining Show. Manager, Copperbelt Agricultural Show Society (Co-op) Ltd., P.O. Box 944 Kitwe.

Lusaka

Aug. 11-14. 46th Zambia Agricultural & Commercial Show. Manager, P.O. Box 333, Lusaka. Annual.

Ndola

June 30-July 4. Int. Trade Fair. Manager, Zambia Trade Fair, P.O. Box 1058, Ndola. Annual. (DIB 70-11-406)

Licensing, Investment Abroad

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.

ARGENTINA—(2810, 2820)—Recently established mixed public-private corporation offers minority equity to private investors in establishing **major petrochemical complex.** Production of ethylene and propylene reserved for mixed corporation, but private sector investment invited in downstream plants to produce **polyethylene, vinyl chlorate monomer, PVC, ethyl glycols, polyethyl glycols, ethylene oxides propylene oxides, polyglycols, caustic soda, chlorinated solvents, vinyl acetate, styrene acetaldehyde, chlorine and other thylene and propylene derivatives.** To qualify, investors must possess experience in production and marketing. Firm agreements to participate must be reached by May. Importation of machinery and equipment for plants authorized. Equipment suppliers and contractors invited to participate in financing. Additional details available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. Principal contact for interested U.S. investors and suppliers is Dr. Oscar Gatti, a/c Presidencia Petroquimica Bahia Blanca S.A.I. & C., Direccion General de Fabricaciones Militares, Cabildo 65, Buenos Aires. P-72001

(2834)—Seeks technology utilized in the **synthesis of drugs for pharmaceutical application.** Firm is medium-sized processer and producer of pharmaceuticals. Diaquimica S.A., Jorge Newbery 1953, Buenos Aires, Argentina. WTD. P-72008

AUSTRIA—(2621)—Licenses to manufacture **special papers** sought by producer of newsprint, book and writing paper. Market could include Austria, southern European countries. Papierfabrik Frohnleiten Carl Schweizer A. G., A-8130 Fronhnleiten, Austria. WTD. P-72015

COSTA RICA—0122—Project to establish **macadamia nut plantation.** Preparations already made include identification of suitable land, nursery with 30,000 grafted trees, initial contacts with Costa Rican investors and trained personnel to manage plantation. Market study available. Falls under Costa Rican export incentives. Total investment estimated about $1 million with local investors providing half. Herster Barres, Jr., Apartado 25, Turrialba, Costa Rica. P-72017

FRANCE—(3581)—Recent industry report indicates sales of **vending machines** growing at rate of 20-25% annually. Estimated 1970 sales $18 million. Beverage machines have 50% of market, candy and pastry machines 40%. Vending machines do not dispense pharmaceuticals and tobacco products in France. Because of competitive market, U.S. manufacturers are advised to consider licensing approach. Copies of the report are available from Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-72016

INDIA—(3545)—Technical collaboration and 25% equity participation sought by regional development entity to establish plant for manufacture of **gauges and similar measuring devices.** Plans call for production of the following type gauges: plug, ring, snap, depth, sheet and wire, feeler, radius, screw pitch, vernier, slip, and micrometer depth. Also level protectors, combination squares, vernier calipers, length and sine bars, and external micrometers. This is a "mixed sector" project, with the development agency holding 26% equity, 25% available to a private firm and 49% of the shares available as a public offering. T. Khanna, Managing Director, Punjab State Development Corp. Ltd., United Commercial Bank Bldg., Sector 17-3, Chandigarh, India. P-72005

JAPAN—(3551)—Major trading company seeks license or joint venture to manufacture **packaging machinery particularly for food industry.** Also interested in agency agreement. Mr. Taguchi, Managing Director, Kanematsu-Gosho Co., Ltd., 5 Takara-cho 2-chome, Chuo-ku, Tokyo, Japan. WTD. P-72009

LESOTHO—(4832)—Prominent attorney seeks American participation in establishing **commercial radio station.** Broadcasts primarily music and commercials, aimed at African audiences in Southern Africa; would not include news or political commentary. Requires technical know-how, equipment and financial support. Ovid Khere Moflol, Box 650, Maseru, Lesotho. P-72004

NETHERLANDS—(3461) — Licensing and distribution rights for manufacture of **enameled, stainless steel, aluminum and plastic household** utensils. Company fully equipped for stamping and deep drawing of metal products and currently makes enameled steel panels for the building industry and a wide variety of plastic household equipment. Mr. H. F. Oostergo, EMAILLEER FABRIEK "DE IJSSEL" N.V., 2 Dorpsweg, Dieren, Netherlands. WTD. P-70211

(3662)—Manufacturer and installer of industrial electrical systems seeks licenses and contractural arrangements to manufacture **electronic security equipment and other electrotechnical products.** Firm's broad expertise and experience ranges from production and installation of all illuminated road signs on Dutch highways, cabinets to house control units, and steel structures for power plant yard to emergency power supply units and electrostatic insect killers. Founded 1922, the firm now employs around 1,200 and has its own sales subsidiary. Ir. W. Chr. de Vleeschouwer, Director, Nolte N.V., Eindhoven, The Netherlands. WTD. P-72014

PERU—(2094)—Bids are invited on establishment of three **fish oil processing plants** in ports of Pisco, Chimbote and Ilo. For each plant Peruvian companies would be formed. Ownership must be divided 25% for the State, 26% for Peruvian private capital and 49% maximum for the foreign participant. Most of production will be exported. Bidders should supply "first envelope" bid to the Ministry by Feb. 28, including plans for installation, costs of machinery and equipment and their financing. "Second envelope" bids are due by March 15. Loan copy (in Spanish) of bid specifications and project information available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-72010

PHILIPPINES—(2824)—Joint venture to establish **polyester plant.** Would produce 12 metric tons of polyester fibers a day. Cost of project estimated at $12 million; U.S. participant offered up to 40% equity. Plant would be second of its kind in Philippines. Reportedly present production cannot meet domestic demand. Write: Ernesto Tanchi, Sr., President, Lakeview Industrial Corp., c/o Riverside Mills Corp., Bo. Rosario, Pasig, Rizal, Philippines. P-72007

SWITZERLAND—2834—Subsidiary of nation's largest pharmaceutical wholesaler seeks license or joint venture to produce **specialty and prescription pharmaceutical preparations.** Will also consider agency agreement. Products of interest include synthetic organic medicinal chemicals, antibiotics, botanical drug preparations for treating diseases of the central nervous, cardiovascular, and respiratory systems, skin preparations, and vitamins. Also interested in manufacture of newly developed surgical dressings, disposables and related products. Parent company operates from modern headquarters in Bern; maintains facilities in five other Swiss cities. Current inventory is around 35,000 products. Also has research and testing laboratories, employs 650. Has agency agreements with wholesale organizations in other European countries. Write: Emil Rufenacht, Asst. Mgr., Galenica—Vertretungen AG, Untermattweg 8, 3001 Bern, Switzerland. WTD. Further details available from Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. WTD. P-72003

UNITED KINGDOM — (3079) — Firm seeks licenses to manufacture **thermo plastic products.** Company has injection molding facilities for custom molding in

all thermo plastics materials and a press capacity ranging from small (10 gram) machines up to those large enough to produce moldings of 1,100 tons. Presently manufactures variety of products from parts small enough for watches up to sinks and fish tanks. Established in 1970, employs 255. Sales outlets in United Kingdom and EEC. Product brochures available from Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. Write: P. G. Simpson, North West Plastics Ltd., Parr Bridge Works, Mosley Common Rd., Boothstown, Worsley, Manchester M28 4AJ, England. WTD. P-72013

3535—Manufacturing rights for materials handling equipment. Also bulk handling and conveying equipment for the food industry. Currently firm produces bulk storage and pneumatic conveying equipment, flexible bulk containers. Employs 40. Write: E. D. Forrest, Marketing Manager, The Tills Engineering Co. Ltd., 5/6 Arbour Lane, Kirkby Industrial Estate, Kirkby, Nr. Liverpool L33 7XF, England. WTD. P-72002

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Business Opportunities Staff and other units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers, used extensively by Government and industry.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.

The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.

WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-924, Washington, D.C. 20230.

Direct Sales

Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.

Field crop farms

01130—LIBYA—Soft and hard wheat. Requests prices, conditions of payments. Cyrenaica Mill Co. (importer), P.O. Box 317, Benghazi, L. A. R. Attn: Mr. Mansur Othman. WTD 12/71.

Miscellaneous nonmetallic minerals

14990—SOUTH AFRICA—All types of natural semiprecious stone material including turquoise. Industrial Partners (Pty.) Ltd. (importer, mfr., retailer), Third Floor, Rosella House, Buitencingle St., Cape Town, Cape Province. WTD 12/71.

Meat products

20118—AUSTRALIA — Information on lines in the canned meat field and the prices that would be available, preferably from West Coast, to save on transportation. Firm already handles U.S. lines on limited basis but mainly as gourmet items and desires to widen scope and comprehensiveness, preferably from source experienced in supermarket stocking. Particularly interested in possibilities of private label packaging. Present opportunity applies to Queensland outlets but could expand to operations in other states. David Jones Ltd. (retailer), Attn: Merchandiser Controller—Food, G.P.O. Box 143B, Brisbane, Queensland 4001. WTD in prep.

20119—GERMANY—Raw skins for manufacture of fur coats, jackets, other fur goods. Correspondence requested in German. WEPE Pelzkonfektion GmbH & Co. KG. (importer, mfr.), 5 Obermuehlenweg, D-7157 Murrhardt, Baden-Wuerttemberg. WTD 12/71.

Canning, preserving foods

20310—AUSTRALIA — Information on canned fish and prices that would be available, preferably from West Coast, to save on transportation. Firm already handles U.S. lines on limited basis but mainly as "gourmet" lines and desires to widen scope and comprehensiveness, preferably from source experienced in supermarket stocking. Particularly interested in possibilities of private label packaging. Present opportunity applies to Queensland outlets but could expand to operations in other states. David Jones Ltd. (retailer), Attn: Food Merchandise Controller, G.P.O. Box 143B, Brisbane, Queensland 4001. WTD in prep.

20324—AUSTRALIA — Information on canned specialties and prices that would be available, preferably from West Coast, to save on transportation. Firm already handles U.S. lines on limited basis but mainly as "gourmet" items and desires to widen scope and comprehensiveness, preferably from source experienced in supermarket stocking. Particularly interested in possibilities of private label

Special Action

Each of the following trade notices is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.

34521 — GERMANY — Cylindrical screws. Specifications in German available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Robert Bosch GmbH (importer, mfr.), Zentraleinkauf — Einkaufskoordination, P.O. Box 50, D-7000 Stuttgart 1, Baden-Wuerttëmberg. WTD 7/71.

34812 — GERMANY — Precision springs. Specifications in German available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Robert Bosch GmbH (importer, mfr.), Zentraleinkauf — Einkaufskoordination, P.O. Box 50, D-7000 Stuttgart 1, Baden-Wuerttëmberg. WTD 7/71.

35620—GERMANY—Bearings for grinding wheels. Specifications in German available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Robert Bosch GmbH (importer, mfr.), Zentraleinkauf — Einkaufskoordination, P.O. Box 50, D-7000 Stuttgart 1, Baden-Wuerttëmberg. WTD 7/71.

36946—GERMANY — Condensers. Specifications in German available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Robert Bosch GmbH (importer, mfr.), Zentraleinkauf — Einkaufskoordination, P.O. Box 50, D-7000 Stuttgart 1, Baden-Wuerttëmberg. WTD 7/71.

packaging. Present opportunity applies to Queensland outlets but could expand to operations in other states. David Jones Ltd. (retailer), Attn: Merchandise Controller—Food, G.P.O. Box 143B, Brisbane, Queensland 4001. WTD in prep.

20330—SPAIN—Canned fruits, vegetables. Correspondence requested in Spanish. Juan CABRERA Guerra (importer, dist.), Victor Hugo, 52, Las Palmas de Gran Canaria. WTD 12/71.

20334—AUSTRALIA — Information on canned fruit juices and prices that would be available, preferably from West Coast, to save on transportation. Firm already handles U.S. lines on limited basis but mainly as "gourmet" items and desires to widen scope and comprehensiveness, preferably from source experienced in supermarket stocking. Particularly interested in possibilities of private label packaging. Present opportunity applies to Queensland outlets but could expand to operations in other states. David Jones Ltd. (retailer), Attn: Merchandise Controller—Food, G.P.O. Box 143B, Brisbane, Queensland 4001. WTD in prep.

Grain mill products

● **20400—CEYLON**—100 tons of starch. Bid deadline Feb. 16. Tender No. COM/TEN/71/54 (iii). Tender available from Embassy Ceylon, Washington, D.C. 20008. The Chairman, Tender Board, Dept. of Small Industries, Homar Building, Bristol St., Colombo 1.

20411—TOGO—Wheat flour (superfine); minimum of 300 to 500 bags a month. Requests price quotations c.i.f. Lome. Correspondence requested in French. Société Commerciale Industrielle Africaine d'Exportation et d'Importation (SOCINA) (importer, dist., retailer), 13, rue de la Mission B.P. 1219, Lome. WTD in prep.

20440—TOGO—Milled rice, preferably long grain; 50 to 100 tons per order. Price quotations c.i.f. Lome. Samples requested. Correspondence requested in French. Société Commerciale Industrielle Africaine d'Exportation et d'Importation (SOCINA) (importer, dist., retailer), 13, rue de la Mission, B.P. 1219, Lome. WTD in prep.

Beverage industries

● **20800—CANADA**—Bourbon whiskey to stock international terminal outlet at Gander airport. Newfoundland Liquor Commission, Kenmount Rd., St. John's, Newfoundland.

Food preparations

20961—JAMAICA—Refined soybean oil for lubricating bread pans. Requirements: 1,000 five gal. drums per annum. Quotations c.i.f. Kingston. H.A.T. Laman, Attn: Mgr. Dir. Mr. H. Laman (importer, dist., agent), 46 Barry St., Kingston. WTD in prep.

Broad woven fabric mills, cotton

22114—GERMANY—Denims made of cotton yarn fabrics. Correspondence requested in German. Otto Walter oHG (mfr.), 24 Wingertstrasse, D-6902 Sandhausen, Baden-Wuerttemberg. WTD 12/71.

Broad woven fabric mills, manmade fiber, silk

22213—TOGO—Suiting cuttings. Import large quantity if prices competitive Samples requested. Price quotations c.i.f. Lome. Correspondence requested in French. Société Commerciale Industrielle Africaine d'Exportation et d'Importation (SOCINA) (importer), 13, rue de la Mission, B.P. 1219, Lome. WTD in prep.

22217—ETHIOPIA—Taffeta linings, 54" width. Shankarbhai S. Patel & Co. (Eth.) Ltd. (importer, dist., agent), P.O. Box 573, Addis Ababa. WTD 11/71.

Narrow fabrics

22411—AFGHANISTAN—Rayon, woolen textiles, narrow woven. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

Dyeing, finishing textiles, except wool fabrics, knit goods

22617 — AFGHANISTAN — Cotton fabrics. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

Floor covering mills, products

22710 — PORTUGAL — Pile fabrics, woven, wool or chiefly wool synthetic for manufacture of painting rolls. Mesquita Lda., Drogas (importer, dist., mfr.), Rua Mouzinho da Silveira 58, Oporto. WTD in prep.

22710—SPAIN—Woven carpets, rugs. Correspondence requested in Spanish. Miguel SOLSONA Llorens (importer, dist.), Galicia, 28, Las Palmas de Gran Canaria. WTD 11/71.

22720—SPAIN—Tufted carpets, rugs. Correspondence requested in Spanish. Miguel SOLSONA Llorens (importer, dist.), Galicia, 28, Las Palmas de Gran Canaria. WTD 11/71.

Textile goods

22940 — AFGHANISTAN — Artificial leather remnants. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

22992—TOGO—Jute empty bags for cocoa, coffee, etc. Prices c.i.f. Lome. Correspondence requested in French. Société Commerciale Industrielle Africaine d'Exportation et d'Importation (SOCINA) (importer, dist., retailer), 13, rue de la Mission, B.P. 1219, Lome. WTD in prep.

Sawmills, planing mills

24211—SPAIN—Lumber, rough, sawed in sawmill. Maderas Valiente, S.A. (importer, dist.), Avda. Pérez Galdós, 49-55, Valencia (8). WTD 11/71.

24212—SPAIN—Lumber, dressed, including ceiling, framing, partition, siding, etc. Maderas Valiente, S.A. (importer, dist.), Avda. Pérez Galdós, 49-55, Valencia (8). WTD 11/71.

24212—SWEDEN—Sawed and/or planed lumber. Karl Fredricson AB (importer, mfr.), Box 55, S-232 00 Arlöv. WTD 12/71.

Millwork, veneer, plywood, prefabricated structural wood items

24316—SWEDEN—Paneling. Karl Fredricson AB (importer, mfr.), Box 55, S-232 00 Arlöv. WTD 12/71.

24320—SWEDEN—Veneer and plywood. Karl Fredricson AB (importer, mfr.), Box 55, S-232 00 Arlöv. WTD 12/71.

Wood products

24911—SPAIN—Lumber, sawn. Maderas Valiente, S.A. (importer, dist.), Avda. Pérez Galdós, 49-55, Valencia (8). WTD 11/71.

Household furniture

25121—NETHERLANDS — Upholstered household furniture. Exclusive representation. Kembo N.V., Attn: L. A. M. Koelman (importer, dist., mfr.), 8 Candialaan, Rhenen. WTD 12/71.

25144—NETHERLANDS—Metal household furniture, upholstered and other. Exclusive representation. Kembo Meubelfabrieken N.V., Attn: L. A. M. Koelman (importer, dist., mfr.), 8 Candialaan, Rhenen. WTD 12/71.

Pulp mills, products

26112—SWITZERLAND—Sulfate pulp, all kinds. Direct purchase & agency. Muhlebach-Papier S.A.; Attn: Mr. Baumgartner (dist., mfr.), 16, Blvd. de la Cluse, 1211 Geneva 9. WTD in prep.

Converted paper, paperboard items

26440—GERMANY—High quality, hand-printed wallpaper; velour wallpaper; metallic wallpaper; wall coverings, vinyl-coated. Herm. Toennesmann KG, Attn: Herr Klaus M. Dross (importer, dist., agent), 4 Duesseldorf-Holthausen, Postfach 224. WTD 12/71.

26440—SPAIN—Wallpaper. Correspondence requested in Spanish. Miguel SOLSONA Llorens (importer, dist.), Galicia, 28, Las Palmas de Gran Canaria. WTD 11/71.

Paperboard containers, boxes

26543—FRANCE—Paper folding boxes (small and medium for liquids). Cartonnages Hernas (mfr.), 80—Feuquières-en-Vimeu. WTD in prep.

Industrial chemicals

28180—GERMANY—Toluol, resorcinol, ethyl acetate, phtalic anhydrite, diphenylamine. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

28180—INDIA—Polyethylene glycol 4000 (in flake form): 5 metric tons; dimetylamine in 40% aqueous solution: 10 to 25 metric tons; hyflosupercel/ dicalite: 3 metric tons. Requests quotations, specifications. B.D. Pathak, Gen. Mgr., Shriram Rayons (mfr.), Akash Deep, Barakhamba Rd., P.O. 445, New Delhi-1. WTD in prep.

28190—GERMANY—Lead nitrate, calcinated sodium carbonate, titanium dioxide, potassium chlorate, potassium nitrate. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

Drugs

28310 — SPAIN — Biological products. Roncales, S.A. (importer, dist.), Tenor Fleta, 5, Zaragoza. WTD 11/71.

28330—SPAIN — Medicinals, botanicals. Roncales, S.A. (importer, dist.), Tenor Fleta, 5, Zaragoza. WTD 11/71.

28340—SPAIN—Pharmaceutical preparations for human, veterinary use. Roncales, S.A. (importer, dist.), Tenor Fleta, 5, Zaragoza. WTD 11/71.

Petroleum refining

● **29100—BURMA**—Myanma Oil Corp., Rangoon, Burma, has issued a trade inquiry regarding crude oil supplies during 1972-73 fiscal year. They request bids for the purchase of a total of approximately 200,000 long tons crude oil during the Burmese fiscal year, Oct. 1972 to

Sept. 1973—both C & F Rangoon and F.O.B. Port of Shipment by airmail supported by proforma invoice. Bid No. YA/WA/MA/23/1/2. No bid deadline quoted. Specifications may be obtained from Myanma Oil Corporation, Marketing Head Office, 622 Merchant St., Rangoon, Burma.

Plastic products

30794 — FRANCE — Collapsible plastic containers (all sizes). Cartonnages Hernas (mfr.), 80-Feuquières-en-Vimeu. WTD in prep.

30794—SURINAM—One-half lb. and 1 lb. plastic margarine containers and closures (307 & 603 sizes). Firm would annually purchase about 250,000 of each size. Margarine en Vettenfabriek N.V. (mfr.), Pad van Wanica Km. 6.5, P.O. Box 594, Paramaribo. WTD in prep.

30796—MEXICO — Polyethelene storage silo (or silos) for wheat. Required capacity: 3,000 tons; inflatable-type with appropriate accessory equipment, including blowers, vents, control instrumentation. Derek Westall, (consultant for flour mills), Apdo. Postal 5-143, Mexico 5, D.F. WTD in prep.

30797—AFGHANISTAN — Plastics dinnerware, tableware, kitchenware. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

Glass, glassware

32291—AFGHANISTAN — Glass table and kitchen ware. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

Glass products

32316 — NETHERLANDS — Fiberglass hose, flexible, for industrial purposes. Efka-Import (importer, dist., agent), 54 Mr. Troelstrastraat, Zandvoort. WTD in prep.

Pottery, related products

32620—AFGHANISTAN — China tableware; commercial, household. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

Abrasive, asbestos, nonmetallic mineral products

32970 — CZECHOSLOVAKIA — High-temperature materials for extruding metals. Research Institute for Powder Metallurgy, Mr. Lubomir Rychlik, Sumperk, Zerotinova St.

Steel mill products

33120 — CZECHOSLOVAKIA — Metallurgical processing lines for steel, nonferrous metals and aluminum—so-called continual lines; tinning, galvanizing, annealing, painting, slitting, shearing and coating lines. Engineering & Metallurgical Works (mfr.), Ing. Oldrich Kollar, Dubaica nad Vahom.

33121—GERMANY — Ferromanganese, ferrochrome, ferromolybden, other ferro alloys. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

33127—GERMANY—Magnetic strip E 7 Imphy MNHG, cold rolled, with slit edges, in coils; 7.5 tons; 24.55 +/— 0.1 × 1.2 +/— 0.05 mm. Offers requested from manufacturer only, *C & F Istanbul, Turkey*. Dynamo strips A-7 DF, 58 × 0.5 mm and A-II DF, 42 × 0.5 mm. INCO Import Export GmbH. (importer), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

33128—GERMANY—Steel billets. INCO Import Export GmbH. (importer, dist., agent), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

Primary smelting, refining of nonferrous metals

33323—GERMANY — High purity lead 99.985. Monthly requirements 100 tons. Quotation c.i.f. Hamburg. Accumulatorenfabrik Sonnenschein (mfr.), 6470 Buedingen, Thiergarten. WTD 12/71.

Rolling, drawing, extruding of nonferrous metals

● **33500—SINGAPORE**—Supply of delivery and installation of 230 Kilovolt Oil-filled power cables and accessories. Tender No. EE. 949.9/0. Bid deadline Feb. 21. Contact Chief Electrical Engineer, Public Utilities Board, City Hall, St. Andrew's Road, Singapore 6.

33512 — GERMANY — Copper forgings. Hamac-Hansella GmbH (dist., mfr.), P.O. Box 340, 406 Viersen. WTD in prep.

Primary metal industries

33910—GERMANY — Weldments, steel plate. HAMAC-Hansella GmbH (dist., mfr.), P.O. Box 340, 406 Viersen. WTD in prep.

Cutlery, hand tools, general hardware

34233—SWITZERLAND — Electric soldering irons, guns, tips, desoldering equipment, cable strippers, tweezers, pliers, other electronic assembly tools. Adola AG (importer, dist.), Etzelstrasse 3, 8800 Thalwil. WTD 12/71.

34294—CZECHOSLOVAKIA — Builders' hardware, finishing tools in construction work for all surfaces—walls, floors, ceilings, installation work (water, heat). Czech Union of Housing Cooperatives, Architect Josef Rott, Central Council of Cooperatives, Prague 1, Tesnov 5.

Heating apparatus, plumbing fixtures

34336—FRANCE—Sawdust, wood bank, wood chip incinerators, industrial types. Descriptive literature, catalog, price list requested. S.I.M.O. (dist., mfr.), Parc Industriel, Ave. J. Perrin, 33 Merignac. WTD 12/71.

Fabricated structural metal products

34443—SWITZERLAND — Residential kitchen, bathroom ventilators, exhaust fans. Therma AG (dist., mfr.), Wilfriedstrasse 6, 8032 Zurich. Attn: Heinz Muller, Marketing Dir. WTD 12/71.

Coating, engraving, allied services

34710—PORTUGAL—Polishing, electroplating, plating, anodizing machinery. INDUFER, Industria Portuguesa de Ferramentas, S.A.R.L. (importer, mfr.), P.O. Box #24, Senhora da Hora. WTD in prep.

Fabricated metal products

34943 — NETHERLANDS — Butterfly valves, ball valves of 10" diameter or over; valves according to ASA specifications. Representations requested for Netherlands, Western Europe. Argus Nederland N.V.; Attn: G. J. Lansink (importer, dist.), Industrieweg 39, P.O. Box 110, Deventer. WTD 12/71.

Farm machinery

35228—ITALY—Implement which operates autonomously through chain provided with scoops, from power-take-off of tractor which capable of digging trenches 40-50 cm deep with maximum width of 30 cm in order to lay small diameter tubes; such implement should be able to work between two rows of trees four to five meters apart. Agrofertile—A. Bombaci (importer, dist.), Via Riccardo da Lentini, 3-5-7, 96016 Lentini (Prov. Catania). WTD in prep.

Construction, mining, materials handling machinery, equipment

35320—CZECHOSLOVAKIA — Excavators (power shovels) for surface extraction of coal. N. Bohemian Coal Basin (sectoral management of mining industry), Ing. Frantisek Solnar, Husovo namesti, Most.

35351—CZECHOSLOVAKIA—Conveyors for long distances in mining industry. N. Bohemian Coal Basin (sectoral management of mining industry), Ing. Frantisek Solnar, Husovo namesti, Most.

Metalworking machinery

35411—GERMANY—Jig boring machines. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

35413—GERMANY—Gear hobbing machines for bevel gears, bevel gear shaping machines, gear honing machines, bevel gear grinding machines, gear lapping and polishing machines, gear shaving machines, gear hardening machines. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

35414—GERMANY—Jig grinding machines, centerless grinding machines, external cylindrical grinding machines. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

35422—GERMANY—Eccentric presses, forging presses, hydraulic drawing presses. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

35423—GERMANY — Continuous steel ball casting machines, complete; coin stamping machines. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

35423—PHILIPPINES—Machinery for making battery plates. Plateworths Industrial Battery Corp., Attn: Jose Tiukimhe (mfr.), 1209 Samson Rd., Caloocan City, P.O. Box 3089, Manila. WTD in prep.

35451—ITALY—Gun drills. Vanadium Utensili S.p.A. (importer, mfr., agent), Km 8 S.S. Moncalieri-Villastellone, 10024 Moncalieri (Torino). WTD in prep.

35481—INDIA—Equipment to manufacture stainless steel tubes. Tasfak Engineering Industries (importer, dist., mfr.), 78/80 Bhajipala Lane, P.O. Box 3064, Bombay 3. WTD 12/71.

35484—NETHERLANDS—Steam vapor cleaners for use in garages and for cleaning facades. Direct purchase or representations. G. J. Kramp N.V. (importer, dist., agent), Burg. v.d. Zandestraat 9, P.O. Box 25, Varsseveld, Gelderland. WTD in prep.

Special industry machinery

● **35500—ALGERIA**—Algerian National Oil Co. has issued a tender calling for

the construction of an extruded plastic mesh plant. The plant will manufacture plastic wind-screen with a mesh of 6 mm., a width of 2 meters, and a length of 50 meters. Tonnage for 1973 is estimated at 1,300 tons, i.e., 1,650 kilometers of wind-screen. Bid submission should be sent under double envelope to: Mr. Sid-Ahmed Ghozali, PGG, SONATRACH, 80 Ave. Ghermoul, Algiers. Interior envelope should be marked "Confidentiel—Ne pas Ouvrir" A l'Attention de Monsieur Sid-Ahmed Ghozali, President-Directeur General. Soumission pour la realisation de l'usine de production mailles extrudees en matieres plastiques. Nom du soumissionnaire: (your firm's name) Adresse (your firm's address). Additional information may be received from Mr. Belkacem Bennikous, 17, rue de la Liberte, Algiers, Telex-SONATRA 91.790/91.916. Bid deadline Feb. 15. Specifications available (in French) to firms domiciled in the U.S. on a short term loan basis from the General Industries Division, BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-5520)

35510—CZECHOSLOVAKIA — Filling machines for foodstuffs; pressure vessels, non-pressure vessels, tanks; equipment for meat industry and slaughter-houses; machinery for processing potatoes (production lines); equipment for processing malt, beer production, beer drafting lines; equipment for bakeries. Strojobal (mfr.), Ing. Frantisek Balcar, Ing. Jan Martinek Slezska ulice, Hradec Kralove 3.

35522—PAKISTAN — Bleaching, dyeing, finishing machines. Specifications available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Sultan Industries Ltd. (importer), c/o Sargodha Textile Mills Ltd., 2nd Floor, The Cotton Exchange, I.I. Chundrigar Rd., Karachi.

35552—PORTUGAL—Hard cover bookbinding machinery. Paulino Ferreira, Filhos, Lda. (book printers), Rua Nova da Trindade, 18-A, Lisbon. WTD in prep.

35595—INDIA—Plant and equipment to manufacture plastic foil capacitors, carbon film resistors and ceramic bodies including hand winding and semi-automatic winding machines for manufacture of plastic foil capacitors, automatic helixing machine with feeder system for spiralling carbon film resistors, printing machine for printing on resistors, diodes and other cylindrical components, vacuum extrusion press for making ceramic bodies and special tunnel for sintering ceramic/ferrite bodies. Quotations c.i.f. Bombay in triplicate together with terms of trade requested soonest. Echjay Electronics Private Ltd. (mfr.), Kanjur Village Rd., Bhandup, Bombay 78. WTD in prep.

General industrial machinery

● **35600 — INDONESIA** — 46 water pumps, 47 tailgate spreaders, 47 industrial tractors and attachments, 23 forklift trucks, 200 rotary scythe grass cutters, 13 diesel generating sets, 13 crushing and screening plants, 38 metered fuel dispensing pumps and various small tools. Tender No. 7/BM/IDA; bid deadline Feb. 4. Directorate General of Highways, Dept. of Public Works and Power, Djil. Pattimura 7, Kebajoran Baru, Djakarta. Specifications available on a short term loan basis to firms domiciled in the U.S. from the General Industries Division, BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-4317).

35641—SWITZERLAND — Commercial kitchen exhaust blowers, industrial blowers, ventilating fans, parts, sub-assemblies. Therma AG (dist., mfr.), Wilfriedstrasse 6, 8032 Zurich. Attn: Heinz Muller, Marketing Mgr. WTD 12/71.

35662 — GERMANY — Gears, drives. Hamac-Hansella GmbH (dist., mfr.), P.O. Box 340, 406 Viersen. WTD in prep.

35663 — GERMANY — Flexible shafts. Hamac-Hansella GmbH (dist., mfr.), P.O. Box 340, 406 Viersen. WTD in prep.

35670—CZECHOSLOVAKIA—Sintering furnaces for cemented carbides. Research Institute for Powder Metallurgy Mr. Lubomir Rychlik, Sumperk, Zerotinova.

35671—CZECHOSLOVAKIA—Continual electrical drying kiln for varnished (in oil) textile tubes from 1 to 5 mms. made of textile or glass fibers; varnish has electro-insulation qualities and can withstand maximum temperature of 250°C. Kablo Vrchlabi (mfr.), Jaroslav Grof, Vrchlabi I.

35671—GERMANY—Industrial arc melting furnaces. INCO Import Export GmbH (importer, dist.), 6000 Frankfurt, Schillerstr. 28. WTD 12/71.

35690 — CZECHOSLOVAKIA — Packaging machines for ball-bearings (from 30 to 200 mms in diameter); ball-bearings should be packed individually or in packages containing 5-10 pieces. ZVL Skalica (ball-bearing manufacturer) Jan Varga, Skalica, Slovakia.

35690 — CZECHOSLOVAKIA — Packaging equipment for medicaments in sterile conditions. Chemoprojekt (Design Engineering and Consulting Organization), Ing. Jargslav Mlynsky, Stepanska 15, Prague 2.

Office, computing, accounting machines

35733 — FRANCE — Peripherals, terminals. Société Nationale des Chemins de Fer Français (SNCF) 105 blvd. Suchet, Paris 16e. Attn: Service Informatique, Mr. Vosluisant.

Electric transmission, distribution

● **36100—INDIA** — Supply transformers as follows: 120 number, 132 KV current type; 23 number, 132 KV neutral current type; 30 number, 66 KV current type; 8 number, 66 KV neutral current type; 150 number, 33 KV current type; and 16 number, 33 KV neutral current. Tender No. IDA/HSEB/3, Feb. 9. Chief Engineer (Planning and Construction), Design Directorate, Haryana State Electricity Board, Shop-Cum-Flat No. 6, Sector 17 E, Chandigarh. Tender documents available at $13.50 per set from Accounts Officer, Haryana State Electricity Board, Chandigarh. Specifications available for review only from Power and Electrical Equipment Program, BDC-776, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-5585). IDA financing under Beas Transmission and Distribution Project.

● **36100 — THAILAND** — Supply AC & DC distribution board for transmission line and substation expansion project. Tender No. A015, bid deadline Feb. 14. Foreign Purchasing Section, Procurement Division, Supply and Procurement Dept., Electricity Generating Authority, Nonthaburi. Bid documents available at $25 per set from foregoing authority. Only bids from member countries of Asian Development Bank will be accepted.

36112—CZECHOSLOVAKIA — Measuring instruments for high power RF and VHF in coaxial lines. Czechoslovak Metrolotical Institute, Ing. Peter Bubliak, Podunajske Biskupce, Strojnicka 26.

36121 — CZECHOSLOVAKIA — Transformers 22:750 kW. Research Institute of Energy. Ing. Josef Nejedly, Hybesova 38, Brno.

36122 — PAKISTAN — 11-KV current transformers; 11-KV potential transformers; low tension current transformers; low tension potential transformers. Specifications available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Pak Elektron Ltd. (importer, dist., mfr.), Ferozepur Rd., P.O. Box 524, Lahore, Punjab. WTD 2/71.

36132 — PAKISTAN — 11-KV circuit breakers; low tension circuit breakers. Specifications available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Pak Elektron Ltd. (importer, dist., mfr.), Ferozepur Rd., P.O. Box 524, Lahore, Punjab. WTD 2/71.

36134—PAKISTAN—Low tension current limiting fuses. Specifications available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Pak Elektron Ltd. (importer, dist., mfr.), Ferozepur Rd., P.O. Box 524, Lahore, Punjab. WTD 2/71.

Electrical industrial apparatus

36211—GERMANY—Alternating current motors, incl. parts, attachments. Hamac-Hansella GmbH (dist., mfr.), P.O. Box 340, 406 Viersen. WTD in prep.

36220 — SWITZERLAND — Air-conditioning, refrigeration and cooling control assemblies. Therma AG (dist., mfr.), Wilfriedstr. 6, 8032 Zurich. Attn: Heinz Muller, Marketing Mgr. WTD 12/71.

Household appliances

36344 — SWITZERLAND — Parts for baseboard, wall or household electric accumulator heaters, radiant heating elements, components for portable electric air purifiers, self cleaning units, controls for frying pans, broilers, grills. Therma AG (dist., mfr.), Wilfriedstr. 6, 8032 Zurich. Attn: Heinz Muller, Marketing Mgr. WTD 12/71.

36360—CZECHOSLOVAKIA — Fur industry sewing machinery. Kara (mfr.), Mr. Vladimir Chour, Kara, National Enterprise, Trutnov 3.

Electric lighting, wiring equipment

● **36400—INDONESIA** — Supply LV, single core cables and accessories, tubular steel poles, LV line insulators, bare copper conductors, and connectors and line accessories. Tender No. IDA-165 IND/2, bid deadline Feb. 10. Tender documents obtainable Perusahaan Listrik Negara, Kantor Directur Pembangunan, Djalan Sunan Ngampel No. 1, Kebajoran

Baru, Djakarta, at $2,500 per copy. Bidders must quote FOB, CIF, and C & F prices. Funding by IDA loan. Bids must be delivered by hand to foregoing address. Specifications available on a short-term loan basis to firms domiciled in the U.S. from Power and Electrical Equipment Program, BDC-776, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-5585).

36421—AFGHANISTAN—Electric lighting fixtures—residential. Soofizadeh Ltd. (importer, dist., agent), Malik Asghar Square, Kabul. WTD 9/71.

36430 — PAKISTAN — Lightening arresters. Specifications available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Pak Elektron Ltd. (importer, dist., mfr.), Ferozepur Road, P.O. Box 524, Lahore, Punjab. WTD 2/71.

Radio, television receiving sets

36511 — AFGHANISTAN — Household radios. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

36515—SPAIN—Sound equipment, commercial. Suministros Eléctricos Maldonado (importer, dist.), Fernando el Católico, 63 Madrid (15). WTD 11/71.

Communications equipment

36611—BOLIVIA—Telephone apparatus and equipment; cables; switchboards; telephone apparatus (1,500 units); tools. Specifications in Spanish available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Cooperativa de Teléfonos Automáticos de Santa Cruz de la Sierra, Cotas Ltda. (cooperative), Calle Bolivar 158, Casilla 567, Santa Cruz. WTD in prep.

36623—NETHERLANDS—Wireless paging systems; loudspeaker intercom systems; burglar alarm systems. Alarma N.V. (importer, dist., mfr.), Propellerstraat 1-5, Amsterdam. WTD 12/71.

Electronic components, accessories

36795 — CANADA — Equipment for circuit board printing and etching; laminated material for printed circuit boards. Naz-Dar Canada Ltd., Attn: Douglas Lackie (dist., mfr.), 925 Roselawn Ave., Toronto 19, Ontario. WTD in prep.

Aircraft, parts

37212—INDIA—Two fixed-wing aircrafts for agricultural spraying, commercial display respectively. The Gujarat Flying Club (commercial flying training club), Civil Aerodrome, Harni Rd., Baroda 6, Gujarat State. WTD in prep.

37213—GHANA—One or two new or used 10-20 seat aircraft to be used for newly established domestic air taxi service. Ghana Airways (air transportation), Ghana House, P.O. Box 1636, Accra. WTD in prep.

Ship building, repairing

37321 — JAPAN — Second-hand cabin cruisers (inboard powered motorboats). Mr. Kazuo Muto, I.C.S. Dept. Mgr., Japan Overseas Business Corp. (importer, didst.), Kuroda Heights Bldg., 6-6-16 Akasaka, Minato-ku, Tokyo 107. WTD in prep.

37411—CZECHOSLOVAKIA — Turbotrains and diesel locomotives. Research Institute of Railway Rolling Stock, Ing. Pavel Pavlousek, deputy-director, Kartouzska 4, Prague 5.

37420—CZECHOSLOVAKIA — Railway rolling stock. Research Institute of Railway Rolling Stock Ing. Pavel Pavlousek, deputy-director, Kartouzska 4, Prague 5.

Engineering, laboratory, scientific, research instruments

38110—CZECHOSLOVAKIA — Complete station for measurement of automobile exhaust emission, particularly following components: CO, CO_2, CH_x, NO, NO_2, and O_2, to be used in testing new exhaust systems at automobile manufacturing plant. Aznp Skoda Mlada Boleslav (automobile mfr.) (manufacturer), Mr. Pavel Bym, Test Chemist Mlada Boleslav.

Instruments for measuring, indicating, controlling, physical characteristics

38210—INDIA—Wide range of mechanical measuring and control devices. Complete listing available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Larsen & Toubro Ltd., Farm Equipment Project, Attn: J. P. Nayak (mfr., agent), Powai Works, Saki-Vihar Road, P.O. Box 8901, Bombay 72 AS. WTD in prep.

38213—CZECHOSLOVAKIA — Indirect thermoregulators (continuous PID); bipositional thermoregulators with thermocell sensor (1,800° C); liquid level indicators for various materials with differing permeability (coke, powder coal, cement). ZPA Jinonice, Usti nad Labem, Mr. Stanislav Dolezal, zavod Usti nad Labem, De cinska 55.

38213 — CZECHOSLOVAKIA — Instruments for differential thermal analysis. Research Institute of Energy. Ing. Josef Nejedly, Hybesova 38, Brno.

38213—CZECHOSLOVAKIA — Measuring instrument for humidity of fractions of gravel sand in plants producing concrete. Vodni stavby (water constructions) Rohanskyostrov, Prague 8, Ing. Vladimir Sveda.

38213—CZECHOSLOVAKIA — Instruments for measuring physical properties of minerals. Institute of Geological Survey of the CSSR, Ing. Zdenek Taborsky, Hradebni 9, Prague 1.

38213 — CZECHOSLOVAKIA — Flow measurement calibration instruments. Czechoslovak Institute of Metrology. Jan Kulhanek, research engineer, Bratislava, Godrova 2.

38216—NETHERLANDS — Fire alarm systems. Exclusive representations. Alarma N.V. (importer, dist., mfr.), Propellerstraat 1-5, Amsterdam. WTD 12/71.

Photographic equipment, supplies

38610—SPAIN — Photographic equipment, supplies, especially: still picture equipment, motion picture equipment, film of all classes, sensitized photographic paper and cloth, etc. Suministros Eléctricos Maldonado (importer, dist.), Fernando el Católico, 63, Madrid (15). WTD 11/71.

Jewelry, silverware, plated ware

39130 — SOUTH AFRICA — Finished semiprecious gemstones, cabochons of original U.S. material. Industrial Partners (Pty.) Ltd. (importer, mfr., retailer), Third Floor, Rosella House, Buitencingle St., Cape Town. WTD 12/71.

Wholesalers

50930 — AFGHANISTAN — Old metal, metal scrap (old steel files). Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

Textile remnants

53990—AFGHANISTAN — Textile remnants. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

Agencies

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.

Sighting, fire control equipment

19410—FINLAND — Sighting telescopes for sporting, hunting arms. Oy Schröder Ab, Attn: C. Schröder, Mng. Dir. (importer, dist., retailer), Itälahdenkatu 20, Helsinki 21. WTD 2/71.

Small arms

19512 — FINLAND — Small arms for sporting and hunting, including related ammunition, tools. Oy Schröder Ab, Attn: C. Schröder, Mng. Dir. (importer, dist., retailer), Itälahdenkatu 20, Helsinki 21. WTD 2/71.

Meat products

20119—KOREA—Rawhides, skins. Jeonyang Industries, Ltd. (agent), I.P.O. Box No. 2610, Seoul. WTD 12/71.

20138—FRANCE — Canned meat, meat products. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8e. WTD 2/70.

Dairy products

20230 — VIET NAM — Condensed and powdered milk. Quotations c.i.f. and c indicated separately. General Commerce Rep. (agent), 97 Bis Ham Nghi, P.O. Box 2164, Saigon. WTD in prep.

20230—VIET NAM—Milk ingredients for manufacture of condensed, powdered milk. Wing Fong Trading (importer, dist., mfr.), 34 Cong Ly, Saigon. WTD in prep.

20231—VIET NAM — Infant powdered milk. Quotations c.i.f. & freight Saigon indicated separately. Samples, printed material, catalogs requested. Ets. VAN Y (agent), 141-143 Ham Nghi, P.O. Box 226, Saigon. WTD 12/71.

20232 — VIET NAM — Sweetened condensed milk. Quotations c.i.f. & c Saigon indicated separately. Samples, brochures requested. Wing Fong Trading (agent), 34 Cong Ly, Saigon. WTD in prep.

20233—VIET NAM — Powdered milk. Quotations c.i.f. & c Saigon indicated separately. Samples, brochures requested. Wing Fong Trading (agent), 34 Cong Ly, Saigon. WTD in prep.

Canning, preserving foods

20310—FRANCE—Canned fish. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8e. WTD 2/70.

20320—FRANCE — Ready-made dishes, other food preparations. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8e. WTD 2/70.

20321—FRANCE—Baby foods. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8. WTD 2/70.

20331—ETHIOPIA—Canned fruits, vegetables. Shankarbhai S. Patel & Co. (Eth.) Ltd. (importer, dist., agent), P.O. Box 573, Addis Ababa. WTD 11/71.

20331 — FRANCE — Canned fruits. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8ème. WTD 2/70.

20332—FRANCE — Canned vegetables. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8e. WTD 2/70.

20334—ETHIOPIA—Canned fruit juices, nectars, concentrates. Shankarbhai S. Patel & Company (Eth.) Ltd. (importer, dist., agent), P.O. Box 573, Addis Ababa. WTD 11/71.

20334—FRANCE—Canned fruit juices. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8e. WTD 2/70.

20341—ETHIOPIA—Dried, dehydrated fruits, vegetables, freeze dried products. Shankarbhai S. Patel & Co. (Eth.) Ltd. (importer, dist., agent), P.O. Box 573, Addis Ababa. WTD 11/71.

20341—FRANCE—Dried fruits. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8e. WTD 2/70.

Confectionery

20716—ETHIOPIA—Salted nuts, other confectionery type products. Shankarbhai S. Patel & Co. (Eth.) Ltd. (importer, dist., agent), P.O. Box 573, Addis Ababa. WTD 11/71.

20716 — SWITZERLAND — Peanuts, packaged, for vending machines. Selecta AG, Attn: Josef Jeger, Dir., (importer, dist., agent), 3280 Murten. WTD 10/71.

Food preparations

20999—FRANCE—Honey. SAPAM (importer, dist., agent), 28, rue Marbeuf, Paris 8e. WTD 2/70.

Broad woven fabric mills, cotton

22110—PORTUGAL—Crepes, cretonnes and stretch fabrics, cotton. Fragoso Lda., J. Paiva (importer, agent), Rua do Arsenal 148-3° Salas F & G, Lisbon. WTD in prep.

Knitting mills, products

22530 — BAHAMAS — Men's, women's wool sweaters. Maximus Intl., (dist., agent), P.O. Box 2071, Freeport, Grand Bahama. WTD 12/71.

Yarn, thread mills, products

22812—VIET NAM—Cotton yarn including cotton special combed yarn and grey cotton yarn. Specifications available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Quotations c.i.f. & freight Saigon indicated separately. Samples requested. Ets. VAN Y (agent), 141-143 Ham Nghi, P.O. Box 226, Saigon. WTD 12/71.

22813—VIET NAM—Viscose rayon filament yarn: bright on cone, bleached, quality A grade; 300 denier, 50 filament, 85 twist per meter, 500 denier, 100 filament, 85 twist per meter; semi-dull on cone, quality A grade; 100 denier, 40 filament, 112 twist per meter, 120 denier, 24 filament, 85 twist per meter; raw white, bright on cone, quality A grade; 60 denier, 18 filament, 104 twist per meter, 75 denier, 33 filament, 94 twist per meter; raw white bright in hank, quality A grade; 300 denier, 50 filament, 85 twist per meter, 500 denier, 100 filament, 85 twist per meter. Requests samples, catalogs; quotations c.i.f. & freight Saigon indicated separately. Ets. VAN Y (agent), 141-143 Ham Nghi, P.O. Box 226, Saigon. WTD 12/71.

22820—VIETNAM—Textile yarns wholly or chiefly by weight of cotton, manmade fibers. General Commerce Representative (agent), 97 Bis Ham Nghi, P.O. Box 2164, Saigon. WTD in prep.

Textile goods

22940—SPAIN—Processed textile waste (preferably of synthetic fibers). Mr. Jaime Aura Vicent (agent), Avda. General Mola, 51, Alcoy, Alicante. WTD 12/71.

22952—VIETNAM—Leather products including imitation, artificial leather. Quotations c.i.f. and freight Saigon indicated separately; catalogs requested. General Commerce Representative (agent), 97 Bis Ham Nghi, P.O. Box 2164, Saigon. WTD in prep.

Fabricated textile products

23940—FINLAND—Tents for camping. Oy Schröder Ab, Attn: C. Schröder, Mng. Dir. (importer, dist., retailer), Itälahdenkatu 20, Helsinki 21. WTD 2/71.

23990—FINLAND—Sleeping bags, inflatable mattresses. Oy Schröder Ab, Attn: C. Schröder, Mng. Dir. (importer, dist., retailer), Itälahdenkatu 20, Helsinki 21. WTD 2/71.

Furniture, fixtures

25912—IRAN—Venetian blinds, unassembled parts and components, to be fabricated in Tehran plant. Ackbarein, Mohammad-Taghi (importer, dist., agent), Elizabeth II Blvd., No. 34, P.O. Box 13-1239, Tehran. WTD 12/71.

Pulp mills

26112—KOREA—Pulp mills—other pulp, including wood, and pulp mill byproducts, except tall oil. Jeonyang Industries Ltd. (agent), I.P.O. Box No. 2610, Seoul. WTD 12/71.

Paperboard mills, products

26315—DENMARK—Kraftliner board. P & J Agentur (importer, dist., agent), 32 Hjulmagervej, DK-8900 Randers. WTD 12/71.

General commercial printing

27413—BAHAMAS—Souvenirs, souvenir cards. Maximus International (dist., agent), P.O. Box 2071, Freeport, Grand Bahama. WTD 12/71.

Industrial chemicals

28180 — INDIA — Industrial chemicals (glycol, alcohol and amines). Mr. Habeeb Alladin, Mng. Dir., Afrasian Development Co. Pvt. Ltd. (agent), 5-B Link Rd., Jangpura Extension, P.O. Box 584, New Delhi. WTD in prep.

28181—PAKISTAN—Miscellaneous cyclic chemical products. Zaminos (agent), 106-107 WAPDA House, Shahrah-e-Quaid-e-Azam, Lahore. WTD 12/71.

28183—PAKISTAN—Rubber processing chemicals. Zaminos (agent), 106-107 WAPDA House, Shahrah-e-Quaid-e-Azam, Lahore. WTD 12/71.

28183—TAIWAN—Cellulose acetate plastic, cellulose nitrate, methyl cellulose. United Engineering Co., Ltd. (importer, agent, exporter), 2nd Fl., 7-37 Chung Shan North Rd., Sec. 2, Taipei 104. WTD in prep.

Synthetic materials

28210 — VIETNAM — Polyethylene, or polystyrene, resins—low density. Quotations c.i.f. and freight Saigon indicated separately; samples requested. New World Representative (agent), 98 Ngo Quyen, P.O. Box 196, Cholon. WTD in prep.

28212—THAILAND—Melamine decorative laminated sheets. Requests catalogs, c.i.f. Bangkok prices. T. Kijthavorn Ltd. Partnership (importer, dist.), 538-538/1-3 Bamrungmuang Rd., P.O. Box 395, Bangkok. WTD in prep.

28232—KENYA—Viscose rayon staple fibers, dull crimped semi or uncrimped, raw white—commercial moisture regain 13%. Requirements 250,000 lbs of 36 mm, 275,000 lbs. of 38 mm., 100,000 lbs. of 46 mm. per mo. Gathani Ltd. (agent), P.O. Box 40329, Nairobi. WTD 1/71.

Drugs

28331—SWITZERLAND—Synthetic organic medicinal chemicals, antibiotics for human use. Requests offers from manufacturers only. Galenica Vertretungen AG, Attn: E. Rüfenacht (dist., mfr.), Untermattweg, 3000 Bern. WTD 12/71.

28332 — SWITZERLAND — Botanical drugs, naturally occurring vitamins, drugs of animal origin, other organic medicinal chemicals. Request offers from manufacturers only. Galenica Vertretungen AG, Attn: E. Rüfenacht (dist., mfr.), Untermattweg, 3000 Bern. WTD 12/71.

28340—KOREA—All kinds of nonprescription medicine. Requests specifications, quotations. Shin-Han Pharmaceutical Co. (importer, dist., agent), I.P.O. Box 1392, Seoul. WTD in prep.

28340—VIET NAM — Pharmaceuticals for human, veterinary use. Requests samples, catalogs; quotations c.i.f. & freight Saigon indicated separately. Ets. VAN Y (agent), 141-143 Ham Nghi, P.O. Box 226, Saigon. WTD 12/71.

28341 — SWITZERLAND — Pharmaceutical preparations affecting neoplasms, endoctrin system and metabolic diseases for human use, including anticonceptional products. Requests offers from manufacturers only. Galenica Vertretungen AG, Attn: E. Rüfenacht (dist., mfr.), Untermattweg, 3000 Bern. WTD 12/71.

28342 — SWITZERLAND — Preparations acting on central nervous system, sense organs, in particular for rheumatic treatment. Request offers from manufacturers only. Galenica Vertretungen AG, Attn: E. Rüfenacht (dist., mfr.), Untermattweg, 3000 Bern. WTD 12/71.

28343 — SWITZERLAND — Preparations acting on cardiovascular system. Requests offers from manufacturers only. Galenica Vertretungen AG, Attn: E. Rüfenacht (dist., mfr.), Untermattweg, 3000 Bern. WTD 12/71.

28344 — SWITZERLAND — Preparations acting on respiratory system. Requests offers from manufacturers only. Galenica Vertretungen AG, Attn: E. Rüfenacht (dist., mfr.), Untermattweg, 3000 Bern. WTD 12/71.

28348 — PAKISTAN — Pharmaceutical preparations affecting parasitic, ineffective diseases, for human use. Zaminos (agent), 106-107 WAPDA House, Shrahrah-e-Quaid-e-Azam, Lahore. WTD 12/71.

Paints, varnishes, lacquers, enamels

28511 — ITALY — Special, top quality white and yellow paints for street markers, traffic signs, having maximum resistance to weathering. Giuseppe Santamaria (importer, dist., agent), Via E. Raggio 26, 15067 Novi Ligure (Alessandria). WTD 12/71.

28517—THAILAND — Lacquers, clear gloss, furniture. Requests catalogs, c.i.f. Bangkok prices. T. Kijthavorn Ltd. Partnership (importer, dist.), 538-538/1-3 Bamrungmuang Rd., P.O. Box 395, Bangkok. WTD in prep.

Agricultural chemicals

28710—PAKISTAN—Fertilizers (MAP-12-52). Zaminos (agent), 106-107 WAPDA House, Shahrah-e-Quaid-e-Azam, Lahore. WTD 12/71.

Plastic products

30795—SWITZERLAND — Insulating, wiring, printed circuit plastics for electronic production industry: novelties only. Requests offers from manufacturers only. Otto Pfenninger AG, Attn: Dr. H. H. Pfenninger (dist., agent), Durfourstrasse 56, 8008 Zurich. WTD 9/71.

Flat glass

32114—AUSTRIA — Shower doors, tub enclosures. Requests replies in German. O. & M. Weber Ges.m.b.H. (importer, dist., agent), Gumpendorferstrasse 147, A-1060 Vienna. WTD 12/17.

Glass products

32315—AUSTRIA — Bathroom mirrors. Correspondence requested in German. O. & M. Weber Ges.m.b.H. (importer, dist., agent), Gumpendorferstrasse 147, A-1060 Vienna. WTD 12/71.

32316—THAILAND—Glassware for laboratory, scientific use. Requests catalogs, c.i.f. Bangkok prices. White & Co. Ltd. Attn: Heiner Hamann, Sales Mgr. (importer, agent), 8th Floor, Olympia Bldg., 956 Rama IV Rd., P.O. Box 2718, Bangkok. WTD 12/71.

Structural clay products

32530 — VIET NAM — Floor tiles. Requests samples, catalogs; quotations c.i.f. & freight Saigon indicated separately. Ets. VAN Y (agent), 141-143 Ham Nghi, P.O. Box 226, Saigon. WTD 12/71.

Abrasive, asbestos, nonmetallic mineral products

32913 — THAILAND — Sandpapers, flintpapers. Requests catalogs, c.i.f. Bangkok prices. T. Kijthavorn Ltd. Partnership (importer, dist.), 538-538/1-3 Bamrungmuang Rd., P.O. Box 395, Bangkok. WTD in prep.

Steel mill products

33120—INDIA — Steel plates, strips, sheets. Mr. Habeeb Alladin, Mng. Dir., Afrasian Development Co. Pvt. Ltd. (agent), 5-B Link Rd., Jangpura Extension, P.O. Box 584, New Delhi. WTD in prep.

33126—VIET NAM—Iron and steel pipes, tubes. Quotations c.i.f. and c Saigon indicated separately. Catalogs requested. General Commerce Representative (agent), 97 Bis Ham Nghi, P.O. Box 2164, Saigon. WTD in prep.

33157 — THAILAND — Wire netting, green enamel iron, aluminum coated. Requests catalogs, c.i.f. Bangkok prices. T. Kijthavorn Ltd. Partnership (importer, dist.), 538-538/1-3 Bamrungmuang Rd., P.O. Box 395, Bangkok. WTD in prep.

Primary smelting, refining of nonferrous metals

33323—INDIA—Primary refined lead and pure lead ingots. Mr. Habeeb Alladin, Mng. Dir., Afrasian Development Co. Pvt. Ltd. (agent), 5-B Link Rd., Jangpura Extension, P.O. Box 584, New Delhi. WTD in prep.

Secondary smelting, refining of nonferrous metals

33414—INDIA—Zinc ingot, shot, plates, sheets. Mr. Habeeb Alladin, Mng. Dir., Afrasian Development Co. Pvt. Ltd. (agent), 5-B Link Rd., Jangpura Extension, P.O. Box 584, New Delhi. WTD in prep.

Rolling, drawing, extruding of nonferrous metals

33512—INDIA — Copper bars, sheets, plates. Mr. Habeeb Alladin, Mng. Dir., Afrasian Development Co. Pvt. Ltd. (agent), 5-B Link Rd., Jangpura Extension, P.O. Box 584, New Delhi. WTD in prep.

33571—THAILAND—Insect wire screening, aluminium. Requests catalogs, c.i.f. Bangkok prices. T. Kijthavorn Ltd. Partnership (importer, dist.), 538-538/1-3 Bamrungmuang Rd., P.O. Box 395, Bangkok. WTD in prep.

33574—SWITZERLAND—Special wire and cable for electronics industries. Requests offers from manufacturers only. Otto Pfenninger AG, Attn: Dr. H. H. Pfenninger (dist., agent), Dufourstrasse 56, 8008 Zurich. WTD 9/71.

33578 — NETHERLANDS — Precision power wire wound and heat sink, according to MIL specifications. Koning en Hartman Ingenieursbureau N.V. (importer, dist.), 30 Koperwerf, The Hague. WTD 1/71.

Cutlery, hand tools, general hardware

34211—FINLAND—Hunting knives. Oy Schröder Ab, Attn: C. Schröder, Mng. Dir. (importer, dist., retailer), Itälahdenkatu 20, Helsinki 21. WTD 2/71.

34230—SWITZERLAND—Novel types of can and bottle openers; similar small kitchen items; small multipurpose hand tools for household use, do-it-yourself centers Luedi & Co. AG., Attn: Hermann Luedi, Pres. (dist., agent), 9230 Flawil. WTD 12/71.

34233 — NETHERLANDS — Gardening tools. Exclusive agency. P.J. Schaap (importer, dist.), 7 Industrieweg, Grootebroek, N. Holland. WTD in prep.

34233 — SWITZERLAND — Handtools, other production devices for manufacture of electronic printed circuits; wiring, insulating, other tools for electronics production industry. Requests offers from manufacturers only. Otto Pfenninger AG, Attn: Dr. H. H. Pfenninger (dist., agent), Dufourstrasse 56, 8008 Zurich. WTD 9/71.

Heating apparatus, plumbing fixtures

34310—ENGLAND—All types of plumbing materials (e.g. baths, sinks, of whatever material). R. Ronaldson & Co. Ltd., Attn: A. McIntosh, Purchasing Dir., (dist.), New Mill, Wesley St., Bamber Bridge, Preston, PR5 6JH. WTD in prep.

Metal stampings

34610—SWITZERLAND—Novel stamped metal utensils of all kinds mainly for kitchen, general household use. Luedi + Co. AG., Attn: Hermann Luedi, Pres. (dist., agent), 9230 Flawil. WTD 12/71.

34614 — FINLAND — Cookingware for camping. Oy Schröder Ab, Attn: C. Schröder, Mng. Dir. (importer, dist., retailer), Itälahdenkatu 20, Helsinki 21. WTD 2/71.

Fabricated metal products

34990—FINLAND—Birdcalls (whistles). Oy Schröder Ab, Attn: C. Schröder, Mng. Dir. (importer, dist., retailer), Itälahdenkatu 20, Helsinki 21. WTD 2/71.

Engines, turbines

35192 — NETHERLANDS — Industrial type gasoline engines. Exclusive agency. Geveke Motoren en Grondverzet N.V. (importer, dist., agent), 45 Spaklerweg, P.O. Box 4091, Amsterdam. WTD 10/71.

35193 — NETHERLANDS — Diesel-engine generator sets, other rotating equipment. Exclusive agency. Geveke Motoren en Grondverzet N.V. (importer, dist., agent), 45 Spaklerweg, P.O. Box 4091, Amsterdam. WTD 10/71.

35194 — NETHERLANDS — Industrial type diesel engines. Exclusive agency. Geveke Motoren en Grondverzet N.V. (importer, dist., agent), 45 Spaklerweg, P.O. Box 4091, Amsterdam. WTD 10/71.

Farm machinery

35227 — NETHERLANDS — Lawn mowers; rotary cutters for pasture topping. Exclusive agency. A. J. Vogelenzang N.V.; Attn: A. H. Provoost (importer, dist., agent), 30 Wageningsestraat, P.O. Box 1, Andelst, Gld. WTD in prep.

35227 — NETHERLANDS—Power lawnmowers. Exclusive agency. P. J. Schaap (importer, dist.), 7 Industrieweg, Grootebroek, N. Holland. WTD in prep.

35228 — NETHERLANDS — Brushcutters and slope-mowers of heavy duty construction machinery type. Exclusive agency. H. van der Lienden N.V. (importer, dist., agent), 24 Weltevreden, De Bilt, Utrecht. WTD in prep.

Construction, mining, materials handling machinery, equipment

35311 — NETHERLANDS — Construction tractors. Exclusive agency. Geveke Motoren en Grondverzet N.V. (importer, dist., agent), 45 Spaklerweg, P.O. Box 4091, Amsterdam. WTD 10/71.

35314—NETHERLANDS—Power cranes, direct draglines, attachments for groundmoving. Exclusive agency. Geveke Motoren en Grondverzet N.V. (importer, dist., agent), 45 Spaklerweg, P.O. Box 4091, Amsterdam. WTD 10/71.

35314—PORTUGAL—Power cranes, hydraulic and telescopic type. Ahlers Lindley, Lda. (agent), Rua do Ferregial 33-2°, Lisbon. WTD 12/71.

35316—PAKISTAN—Mixers, pavers, re-

lated equipment. Zaminos (agent), 106-107 WAPDA House, Shahrah-e-Quaid-e-Azam, Lahore. WTD 12/71.

35319—NETHERLANDS — Large types of earthmoving equipment. Exclusive agency. Geveke Motoren en Grondverzet N.V. (importer, dist., agent), 45 Spaklerweg, P.O. Box 4091, Amsterdam. WTD 10/71.

35319—TAIWAN—Railway maintenance of way equipment. United Engineering Co., Ltd. (importer, agent, exporter), 2nd Fl., 7-37 Chung Shan North Rd., Sec. 2, Taipei 104. WTD in prep.

35321—PAKISTAN—Underground mining, mineral benefication machinery, equipment. Zaminos (agent), 106-107 WAPDA House, Shahrah-e-Quaid-e-Azam, Lahore. WTD 12/71.

35362 — NETHERLANDS — Travelling cranes. Exclusive agency. Geveke Motoren en Grondverzet N.V. (importer, dist., agent), 45 Spaklerweg, P.O. Box 4091, Amsterdam. WTD 10/71.

Metalworking machinery

35419—VIET NAM—Machine tools for metal cutting and shaping including stamping, drilling, lathes, multipurpose tools, semiautomatic and automatic. Requests catalogs; quotations c.i.f. & ocean freight Saigon indicated separately. VINACO (importer, dist., mfr.), 9 Lam Son Sq. (4th floor), P.O. Box 409, Saigon. WTD in prep.

35452—ITALY — Calipers, gauges for precision machine tools. Vanadium Utensili S.p.A. (importer, mfr., agent), Km 8 S.S. Moncalieri-Villastellone, 10024 Moncalieri (Torino). WTD in prep.

35482—ARGENTINA—Pneumatic tool to tighten and unscrew car wheel lugs. Olympia S.R.L. (importer, agent, exporter), 9 de Julio 1618, Mendoza, Provincia de Mendoza. WTD in prep.

35482 — SWITZERLAND — Pneumatic, power-driven, other novelty tools as used by mechanical workshops, bodyshops, in sheet metalwork plants, by appliance industry etc.; 220 volts. 50 cycles. AIR-TOOL AG; Attn: Max Rusterholz (importer, dist., retailer), Grundwiesstrasse 20, 870 Küesnacht. WTD 12/71.

35484—SWITZERLAND—Small automotive maintenance tools, instruments; novelties only. Requests offers from manufacturers. Auto-Ersatzteile AG (importer, dist., agent), Bäckerstrasse 36/38, 8004 Zurich. WTD 12/71.

Special industry machinery

35510—VIET NAM—Flash freezing dehydrating equipment. Quotations c.i.f. & ocean freight Saigon indicated separately. Catalogs, printed material requested. VINACO (importer, dist., mfr.), 9 Lam Son Sq. (4th floor), P.O. Box 409, Saigon. WTD in prep.

35521—TAIWAN—Textile machinery including knitting, spinning machines. United Engineering Co., Ltd. (importer, agent, exporter), 2nd Fl., 7-37 Chung Shan North Rd., Sec. 2, Taipei 104. WTD in prep.

35521—TAIWAN—Textile machinery including spinning, knitting, bleaching, dyeing, finishing machines. Lanson Enterprises Ltd. (importer, agent, exporter), Rm. 809, Enterprise Bldg., 54-18 Chung Shan North Rd., Sec. 3, Taipei 104. WTD in prep.

35551 — VIET NAM — Printing trade machinery, equipment including presses, offset and plates, types. Quotation c.i.f. & c Saigon indicated separately. Catalogs requested. General Commerce Representative (agent), 97 Bis Ham Nghi, P.O. Box 2164, Saigon. WTD in prep.

35595 — SWITZERLAND — Advanced printed circuit production equipment, parts, related attachments, multilayer and multiwire techniques. Requests offers from manufacturers only. FAG S.A., Attn: H. R. Nyffeler, Mng. Dir. (dist., mfr., agent), 7 rue de Genève, 1001 Lausanne. WTD 10/71.

35595 — SWITZERLAND — Tools, small machinery for manufacture of printed circuits and electronics production industry; wiring systems. Requests offers from manufacturers only. Otto Pfenninger AG, attn: Dr. H. H. Pfenninger (dist., agent), Dufourstrasse 56, 8008 Zurich. WTD 9/71.

35595—THAILAND—Minting equipment, complete line. Requests catalogs, technical data, c.i.f. Bangkok prices. Anglo-Thai Engineering Ltd., Attn: Paul Yates, Mgr., Security Div. (importer, dist.), 137 Wireless Rd., Bangkok. WTD in prep.

General industrial machinery

35613 — AFGHANISTAN — Gasoline-powered water pumps for irrigation (2″); domestic water pumps (1″) electric powered. Akbar Export-Import Co., Ltd. (importer, dist., agent), Latif Market, Masjid-e-Puli Khishti, Kabul. WTD in prep.

35690—NETHERLANDS — Packaging machinery. Agencies for The Netherlands, West Germany requested, perhaps license arrangements. N.V. Machinefabriek M. Brouwer & Co., Attn: J. Heling Jr. (dist., mfr), Adamsweg 34a, Hengelo (Ov). WTD 12/71.

35690—SWITZERLAND—Advanced and novel equipment, components, materials for general industrial use, all kinds. Requests offers from manufacturers only. Carl Sigerist & Cie, Attn: H. C. Sigerist (dist., mfr.), Platz 4, 8201 Schaffhausen. WTD 8/71.

Office, computing, accounting machines

35731—FRANCE — Second-hand computers. Ordinateurs Equipement (importer, retailer), 38, rue de Lisbonne, Paris 8e. WTD 12/71.

Service industry machines

35891—SWITZERLAND — Microwave ovens, small and medium-size, for catering trade. Selecta AG, Attn: Josef Jeger, Dir. (importer, dist., agent), 3280 Murten. WTD 10/71.

35892—SWITZERLAND—Water pollution control equipment, novelties, all kinds. Carl Sigerist & Cie, Attn: H. C. Sigerist (dist., mfr.), Platz 4, 8201 Schaffhausen. WTD 8/71.

Electrical industrial apparatus

36214—NETHERLANDS—Prime mover generator sets. Exclusive agency. Geveke Motoren en Grondverzet N.V. (importer, dist., agent), 45 Spaklerweg, P.O. Box 4091, Amsterdam. WTD 10/71.

36220—NETHERLANDS—Electronic industrial controls, control accessories. Exclusive agency. C.N. Rood N.V. (importer, dist., agent), P.O. Box 4542, Rijswijk, Zuid Holland. WTD 9/71.

36220—SURINAM—Equipment for measurement and control of industrial processes. Firm would import and maintain inventory of equipment and spares and tools and instruments necessary for supporting service. SURTEL-Radio Holland N.V. (importer, agent, retailer), Grote Hofstraat 7, P.O. Box 155, Paramaribo. WTD 12/71.

Household appliances

36322—KUWAIT—Refrigerators (household). al-QUTAMI, Bader A. (dist., agent, retailer), P.O. Box 2145, Kuwait. WTD 5/71.

Electric lighting, wiring equipment

36425 — NETHERLANDS — Lighting equipment for garden, terrace and general outdoor purposes. Exclusive agency. P. J. Schaap (importer, dist.), 7 Industrieweg, Grootebroek, N. Holland. WTD in prep.

36430—NETHERLANDS—Circuit connectors for commercial, military applications, according to MIL specifications. Koning en Hartman Ingenieursbureau N.V. (importer, dist.), 30 Koperwerf, The Hague. WTD 1/71.

Radio, television receiving sets

36512—KUWAIT—Household television receivers. al-QUTAMI, Bader A. (dist., agent, retailer), P.O. Box 2145, Kuwait. WTD 5/71.

Communication equipment

36610—VIET NAM—Telephone station from 1 to 5 automatic lines for 200 substations. Requests catalogs, details on packing, delivery, payment; quotations c.i.f. & ocean freight Saigon indicated separately. A Son (Montasie Representative) (agent), P.O. Box 1061, Saigon. WTD 7/71.

36625—ARGENTINA—Remote controls for automatic garage door openers; electric burglar alarm apparatus; electronic fire alarm apparatus; security devices; pilferage prevention devices. Olympia S.R.L. (importer, agent, exporter), 9 de Julio 1618, Mendoza, Provincia de Mendoza. WTD in prep.

36625—JAMAICA — Household security (i.e., anti-burglar) devices operating on field-effect radar or sound principles. Devices must be operable on 115 volt, 50 cycle current, and on 115 volt d.c. Price should not exceed $300 c.i.f. Kingston. Requests brochures, technical literature. Standford H. Williams (importer, agent), P.O. Box 125, Kingston 7. WTD in prep.

36628—THAILAND—Aviation communication test equipment, air and ground. Requests catalogs, c.i.f. Bangkok prices. United Industry Ltd. Partnership (importer, dist.), 499/11-16 Siyek Rachtaevee, Petchburi Rd., P.O. Box 1436, Bangkok. WTD 8/71.

36629 — NETHERLANDS — Microwave telephone, other communications equipment. Exclusive agency. C. N. Rood N.V. (importer, dist., agent), P.O. Box 4542, Rijswijk, Zuid Holland. WTD 9/71.

Electronic components, accessories

36792—NETHERLANDS — Capacitors, metalized polyester dielectric, mica transmitting button mica and mica, dipped, according to MIL specifications. Koning en Hartman Ingenieursbureau N.V. (importer, dist.), 30 Koperwerf, The Hague. WTD 1/71.

36795—SWITZERLAND—Tools, materials for production of printed circuits. Requests offers from manufacturers only.

Otto Pfenninger AG, Attn: Dr. H. H. Pfenninger (dist., agent), Dufourstrasse 56, 8008 Zurich. WTD 9/71.

Motor vehicles, equipment

37112—PAKISTAN—Truck chassis and trucks for general utility duty and jeeps. Zaminos (agent), 106-107 WAPDA House, Shahrah-e-Quaid-e-Azam, Lahore. WTD 12/71.

37130—NETHERLANDS—Indoor transport equipment. Representations requested for Netherlands, West Germany. H. J. Hoegen Dijkhof Handelmaatschappij N.V. (importer, dist., agent), 20-26 Keppelseweg, Doetinchem.

37141—SWITZERLAND — Automotive accessories, parts; all kinds, genuine novelties only. Requests direct offers from producers. Auto-Ersatzteile AG (importer, dist., agent), Bäckerstrasse 36/28, 8004 Zurich. WTD 12/71.

Engineering, laboratory, scientific, research instruments

38112—NETHERLANDS—Temperature, draught and humidity indicators, recorders. Exclusive agency. Berg & Burg N.V.; Attn: G. W. C. Broekhuis (importer, dist., agent), 5 Merwedeweg, Breukelen. WTD 2/71.

38112—PAKISTAN—Laboratory, scientific instruments. Ross Bros. (importer, dist., agent), 424-A Alfalah Bldg., P.O. Box 234, Shahrah-e-Quaid-e-Azam, Lahore. WTD in prep.

38112—SWITZERLAND—Pollution control instruments, processes; air, water; environment control equipment, novelties. Carl Sigerist & Cie, Attn: H. C. Sigerist (dist., mfr.), Platz 4, 8201 Schaffhausen. WTD 8/71.

38112—THAILAND — Scientific instruments, apparatus for laboratories, hospitals. Requests catalogs, c.i.f. Bangkok prices. White & Co. Ltd., Attn: Heiner Hamann, Sales Mgr. (importer, agent), 8th Floor, Olympia Bldg., 956 Rama IV Road, P.O. Box 2718, Bangkok. WTD 12/71.

Instruments for measuring, indicating, controlling, physical characteristics

38213—NETHERLANDS — Industrial process control, analysis instruments. Meyvis & Co. N.V. (importer, dist., agent), 4 Pergolesilaan, Bergen op Zoom. WTD 2/71.

38213—NETHERLANDS—Pressure and temperature switches. Exclusive agency. Schaeffer & Budenberg N.V.; Attn: P. van Dissel (importer, dist., mfr.), 4 van de Spiegelstraat, The Hague. WTD in prep.

38213 — NETHERLANDS — Flow switches for process applications. Exclusive agency. N.V. Ingenieursbureau Beta (importer, dist., agent), P.O. Box 1809, The Hague. WTD in prep.

38216—NETHERLANDS — PH measuring apparatus for laboratory and industrial use. Exclusive agency. Stopler Instrumenten & Apparaten N.V. (importer, dist., agent), 22 St. Laurensdreef, P.O. Box 2445, Utrecht. WTD in prep.

38220 — NETHERLANDS — Automatic temperature controls. Exclusive agency. Schaeffer & Budenberg N.V.; Attn: P. van Dissel (importer, dist., mfr.), 4 van de Spiegelstraat, The Hague. WTD in prep.

Surgical, medical, dental instruments

38410 — NETHERLANDS — Surgical, medical instruments. Meyvis & Co. N.V. (importer, dist., agent), 4 Pergolesilaan, Bergen op Zoom. WTD 2/71.

38410 — SWITZERLAND — Advanced medical, hospital equipment, bio-electronics, in particular for gynaecology, pediatrics. Requests offers from manufacturers directly. MEDELA AG, Attn: Werner Kraehenbuehl, Mgr. (dist., agent), Industriestrasse 40, 6300 Zug 2. WTD 12/71.

38410—TAIWAN—Surgical, medical instruments. Hundred Countries Trading Center (importer, agent, exporter), 4th Fl., 115-10 Kweilin Rd., Taipei 108. WTD in prep.

38410—THAILAND—Hospital supplies. Requests catalogs, c.i.f. Bangkok prices. White & Co. Ltd., Attn: Heiner Hamann, Sales Mgr. (importer, agent), 8th Floor, Olympia Bldg., 956 Rama IV Rd., P.O. Box 2718, Bangkok. WTD 12/71.

38421 — SWITZERLAND — Genuine novelty surgical dressings, disposables, related supplies for sale through pharmacies. Requests offers from manufacturers only. Galenica Vertretungen AG; Attn: E. Rüfenacht (dist., mfr.), Untermattweg, 3000 Bern. WTD 12/71.

Toys, amusement, sporting goods

39491—FINLAND—Fishing rods, reels, lures, lines. Oy Schröder Ab, Attn: C. Schröder, Mng. Dir. (importer, dist., retailer), Itälahdenkatu 20, Helsinki 21. WTD 2/71.

Manufacturing industries

39912 — THAILAND — Brushes, paint. Requests catalogs, c.i.f. Bangkok prices. T. Kijthavorn Ltd. Partnership (importer, dist.), 538-538/1-3 Bamrungmuang Rd., P.O. Box 395. WTD in prep.

Other Foreign Official Tenders

● 35300 ARGENTINA—Supply, installation, start-up and training of personnel for two iron ore separating plants utilizing the "sink and float" system. Each plant should be able to handle about 100 m.t. of ore per hour. Tender No. 50/71; bid deadline Feb. 22. Direccion General de Fabricaciones Militares, Av. Cabildo 65, Buenos Aires. Specifications available on a short term loan basis to firms domiciled in the U.S. from the General Industries Division, BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202 967-4317).

● 35300 — COLOMBIA — One crawler tractor, two shovel loaders, one crawler mounted shovel, one motor grader, etc. Bid deadline Feb. 14. Contact INCORA, Centro Adm. Nacional, CAN, OFICINA 503, Bogota.

● 35400—NEPAL—Workshop machinery and tools, including: combination turning and milling machine, 200 mm. swing over bed, 900 mm. between centers; two heavy duty power hack saws; powered bolt and threading machine; two pedestal grinders; double ended bench grinder; two combination armature lathe and undercutter machines; battery chargers; precision measuring tools; engine dynamometer; electrical test benches; lubrication equipment; air compressor; vehicle washing plant; small electric generators; portable cylinder boring and honing machines; drying ovens; small heat treat furnace; hydraulic portable cranes, and miscellaneous small hand and powered tools. Bid deadline March 1. The Chief Engineer, Roads Dept., Ministry of Works & Transport, His Majesty's Government, Babar Mahal, Kathmandu. Bid documents containing complete specifications can be obtained from the Chief Engineer, Roads Dept. upon deposit of 100 Nepali Rupees (about $9.80).

Visiting Buyers And Officials

AUSTRALIA—E. J. Colville, Research Publications Pty. Ltd., 418 Canterbury Road, Surrey Hills 3127, Vic., interested in joint venture or appointing U.S. agents, meeting officials of **electronic engineering** companies; **consultants in financial planning** and publishing; **publishers and printers of** journals on **science and technology, meat, hairdressing, library, architecture**; manufacturers of **electronic computer typesetting to offset production.** Jan. 20 via New York for ten days. c/o Australian Consulate General, 636 5th Ave., New York, N.Y. 10020. Itinerary: New York, Chicago, San Francisco. WTD in preparation.

INDIA—Gunvantrai Shivlal Gupta, Vivehanand Mills (Saki), 56 C. P. Tank Road, Bombay 4, interested in meeting U.S. manufacturers of **synthetic water soluble polymers, natural water soluble polymers, paints and varnishes and importers of gar gum.** Jan. via New York for one month. c/o The B. Sessler Co., Inc., 100 Hudson St., New York, N.Y. 10013. Itinerary: New York, Houston, Milwaukee, Minneapolis, San Francisco. WTD 9/71.

ISRAEL—Itzhak Avikha, Director, Road Safety Dept., Ministry of Transport, Hadar Dafna Bldg., Shaul Hameleh St., Tel Aviv, interested in methods of **driver education, road safety campaigns.** Jan. 26 via Washington for three weeks. c/o Embassy of Israel, 1621 22nd St., N.W., Washington, D.C. 20008 or Consulates General in other cities. Itinary: 1/26-28 Washington, D.C., 1/29-2/4 New York, 2/5-10 San Fran., 2/11-16 Los Angeles.

LEBANON—Zafer Tambe, Recherches et Realisation Industrielles S.A.L., P.O. Box 4988, Beirut, interested in visiting U.S. principals and contacting other U.S. suppliers of **laboratory and scientific equipment, electric cables and transformers, teaching equipment for engineering and laboratory instruments** fields. Jan. 17 via New York for two weeks. c/o A. Tambe, M.D., 1301 Forest Hills Blvd., Cleveland Heights, Ohio 44118. Itinerary: New York, Miami, Houston, Chicago, Cleveland, Philadelphia, Glen Rock, N.J., New York. WTD 4/69.

LEBANON—Louise Karkabi, Maison Cabochard, Rue Lyon, Immeuble Araysi, Beirut, interested in visiting U.S. manufacturers and suppliers of **ready-made** children's and adult clothing and **industrial sewing and garment label printing machines.** Jan. 4 via New York for one month. c/o Elie Karkabi, Prudential Insurance Co., 1100 Holcombe Blvd. E., Houston, Tex. 77025. Itinerary: New York, Houston, Dallas. WTD in prep.

New Publications

When ordering any publication, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.

DOMESTIC AND INTERNATIONAL BUSINESS

BUREAU OF DOMESTIC COMMERCE

Chemicals. Vol. 18, No. 3. Annual subscription $1.50 (50¢ more for foreign mailing). Single copy 40¢.

BUREAU OF INTERNATIONAL COMMERCE

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Annual subscription $15 ($6 additional for foreign mailing). Single copy 10¢.

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Switzerland (ET 71-130). 12pp.

Nigeria (ET 71-133). 12pp.

Panama (ET 71-135). 8pp.

Ireland (ET 71-136). 8pp.

Lebanon (ET 71-137). 16pp.

International Marketing Information Service

Exhibitor's Export Market Guide

Need for lasers, other electro-optical equipment may double in Japan by 1973 (IMIS 71-047). 4pp. 10¢.

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Annual subscription $16 ($5 more for foreign mailing). Single copy 15¢.

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Foreign trade regulations of Iran (OBR 71-052). 8pp.

World Markets for U.S. Exports

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ECONOMIC AFFAIRS

SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION

BUREAU OF ECONOMIC ANALYSIS

Survey of current business. December 1971. Vol. 51, No. 12. Annual subscription, including weekly statistical supplements $9 ($3.75 more for foreign mailing). Single copy $1.

BUREAU OF THE CENSUS

Business conditions digest. Data through November. Series ES1 No. 71-12. Annual subscription, including supplements, $15 ($3.75 more for foreign mailing). Single copy $1.50.

Defense indicators. December 1971. Series ES4 No. 71-12. Annual subscription $3.50 ($1 more for foreign mailing). Single copy 35¢.

Small-area data notes. Vol. 6, No. 12. 8pp. 10¢.

Bureau of the Census catalog. January-September 1971. 182pp. $1. Each quarterly issue cumulative to annual volume. Subscription price $3 for 4 consecutive issues, including 12 issues of the monthly supplement. 75¢ more for foreign mailing. Part 1 contains publications; part 2 contains data files and special tabulations.

Districts of the 93rd Congress

Kansas (CDD-93X-14). 8pp. 25¢.

Agriculture

The 1969 Census of Agriculture provides data for all farms. These data are now being issued, by county, with a State summary of the individual county reports of that State. When all individual county and State reports have been issued, a United States summary report will be released. Each report 8 pp. 25¢. Price for complete set of county reports (3,071 reports), $792. Price for complete set of State summary reports, including U.S. summary (51 reports), $12.75. The following State and County reports are now available:

Arizona (15 reports). $4.
Colorado (63 reports). $16.
Idaho (45 reports). $11.50.
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Kansas (106 reports). $26.75.
Montana (57 reports). $14.50.
Nebraska (94 reports). $23.75.
North Dakota (54 reports). $13.75.
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Utah (30 reports). $7.75.

Report on cotton ginnings prior to December 13 for the crop of 1971, by States (A10: 71-10). 1p. 10¢.

Construction and Housing

Housing completions: October 1971 (C 22-71-10). Annual subscription $1. Single copy 10¢.

New one-family homes sold and for sale: October 1971 (C25-71-10). Annual subscription $3. Single copy 10¢.

Housing units authorized for demolition in permit-issuing places: 1970 (C45-1970). 45pp. 75¢.

Authorized construction—Washington, D.C. area. November 1971. (C41-71-11). Annual subscription $1. Single copy 10¢.

1970 Census of Housing

Detailed Housing Characteristics

Alaska (HC(1)-B3). 102pp. $1.
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Block Statistics

Reports in this series present statistics from the 1970 Census by blocks on general characteristics of housing and population:

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Davenport-Rock Island-Moline, Iowa-Ill. urbanized area (HC(3)-85). 38pp. and 10 maps. $2.

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Charleston, S.C. urbanized area (HC(3)-212). 49pp. and 15 maps. $2.75.

Greenville, S.C. urbanized area (HC(3)-214). 54pp. and 10 maps. $2.

Wichita Falls, Tex. urbanized area (HC(3)-248). 33pp. and 7 maps. $1.75.

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Huntington-Ashland, W. Va.-Ky.-Ohio urbanized area (HC(3)-265). 48pp. and 8 maps. $1.75.

Wheeling, W. Va.-Ohio urbanized area (HC(3)-266). 26pp. and 8 maps. $1.75.

Distribution and Services

Canned food—stocks, pack, shipments: Nov. 1, 1971 (B1-72-1). Annual subscription, including 5 issues, $1. Single copy 25¢.

Monthly retail trade—sales and accounts receivable: October 1971 (BR 71-10). 28pp. 25¢.

Monthly selected services receipts: October 1971 (BS71-9). Annual subscription $1. Single copy 10¢.

Weekly retail sales. Estimated weekly retail sales of retail stores in the United States week ending Dec. 25 (CB 71-377). 2pp. 10¢.

Foreign Trade

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Industry

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Apparel survey: 1970 (Series: MA-23A-(70)-1). 28pp. $1.75 per year including M23H. Single copy 25¢.

Wiring devices and supplies: 1970 (Series: MA-36K(70)-1). 8pp. 25¢.

Annual survey of manufactures: 1969, statistics for states, standard metropolitan statistical areas, large industrial counties, and selected cities, part 1—New England Division (Series: M69(AS)-6.1). 32pp. 25¢.

Annual survey of manufacturers: 1969—Part 4, West North Central Division (M69(AS)-6.4). 32pp. 25¢.

Population

1970 Census of Population

General Population Characteristics

New York (PC(1)-B34). 225pp. $1.75.

Characteristics of new voters: 1972 (Series P-20, No. 230). 30pp. 35¢.

Estimates of the population of the United States to Nov. 1, 1971 (Series P-25, No. 472). 2pp. 5¢.

Current Population Reports issued in Series P-20, P-23, P-25, P-26, P-27, P-28 (summaries only), P-60, and P-65 are sold as a single consolidated subscription at $14 per year, $3.50 more for foreign mailing.

1970 Census of Population and Housing

Employment Profiles of Selected Low-Income Areas

Houston, Tex. (PHC(3)-30). 264pp. $2.

Atlanta, Ga. (PHC(3)-36). 192pp. $2.50.

San Diego, Calif. (PHC(3)-39). 328pp. $2.50.

San Antonio, Tex. (PHC(3)-50). 192pp. $1.50.

Providence, R.I. (PHC(3)-62). 192pp. $1.50.

SCIENCE AND TECHNOLOGY

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Daily weather maps, weekly series. Dec. 27, 1971-Jan. 2, 1972. Annual subscription $7.50. Domestic airmail $5.20 more. Foreign surface mail $7.50 more. Single copy 15¢.

Introduction to solar terrestrial activity for geomagnetic studies. Part 1: The sun and solar wind. (ERL 218-ESL 18). 22pp. 30¢.

Surface observations (Federal Meteorological Handbook No. 1. Change No. 2. Effective Jan. 1, 1972, $1.25.

Radiosonde observations (Federal Meteorological Handbook No. 3). Change No. 2. Sept. 1, 1971. Supersedes Seventh Edition of WBAN Circular P. $1.50.

Upper wind code (Federal Meteorological Handbook No. 6). Effective Jan. 1, 1972. $2. This is a joint publication of the U.S. Dept. of Commerce, U.S. Dept. of Defense and the U.S. Dept. of Transportation

NATIONAL BUREAU OF STANDARDS

Physics and chemistry—Section A of the Journal of Research. Vol. 75A, No. 5. Annual subscription $9.50 ($2.25 more for foreign mailing). Single copy prices varies. This issue $1.75.

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Order the following reports on Government-sponsored research from: National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Make check or money order payable to National Technical Information Service. Price for each document is $3 (microfiche 95¢) unless otherwise specified.

Effects of studded tires (PB-204 272). By the Minnesota Department of Highways. 52pp.

The application of social and economic values to spectrum management (PB-203 297). By the National Academy of Engineering's Committee on Telecommunications for the Executive Office of the President's Office of Telecommunications Management. 109pp. Discusses present and future problems of spectrum management, various alternatives available, and practical possibilities.

Basic factors bearing on the future use of the radio spectrum, Vol. I: Summary (PB-203 359). By IIT Research Institute for the Executive Office of the President's Office of Telecommunications Management. 65pp.

Same title, Vol. II: Technical, social, economic and administrative factors. 327pp. $6 (paper).

Selected annotated bibliography of the civil, industrial and scientific uses for nuclear explosions (TID-3522—Rev. 9). By AEC's Div. of Technical Information Extension. $6 (paper). 406pp.

Consumer participation in neighborhood comprehensive health care centers, Vol. I: Interpretive report (PB-203 459). By Human Sciences Research, Inc. for the National Center for Health Services Research and Development. 178pp.

Same title, Vol. II: Questionnaire data and critique of the instrument. 178pp.

A six-volume report and summary prepared by the MITRE Corp. for the Executive Office of the President's Office of Science and Technology studies a standard methodology for anticipating the impact of new technologies on society.

A technical assessment methodology, Vol. I: Some basic propositions (PB-202 778-1). $6 (paper copy only). 307pp.

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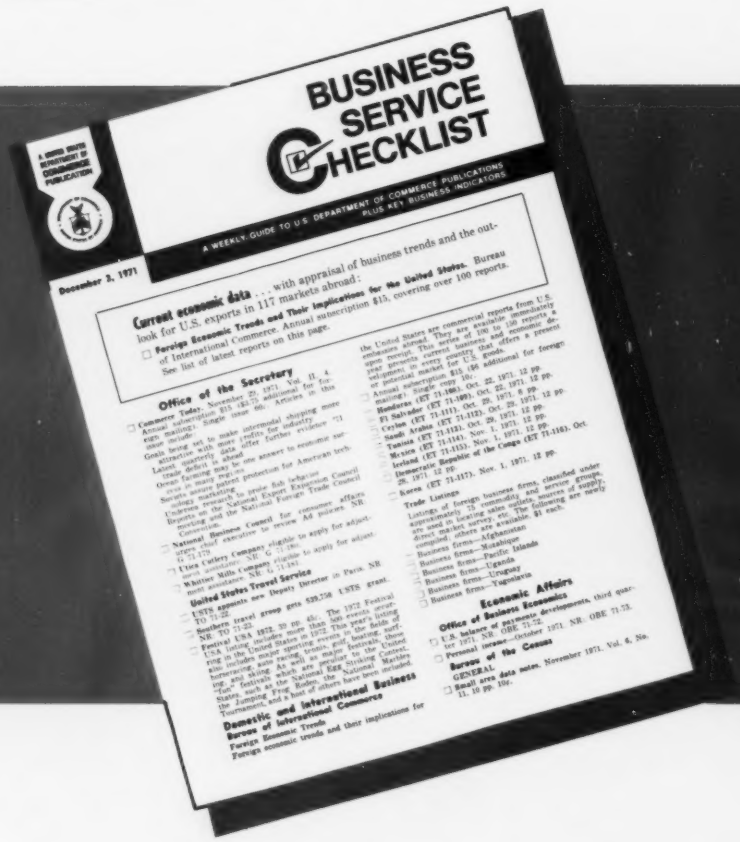
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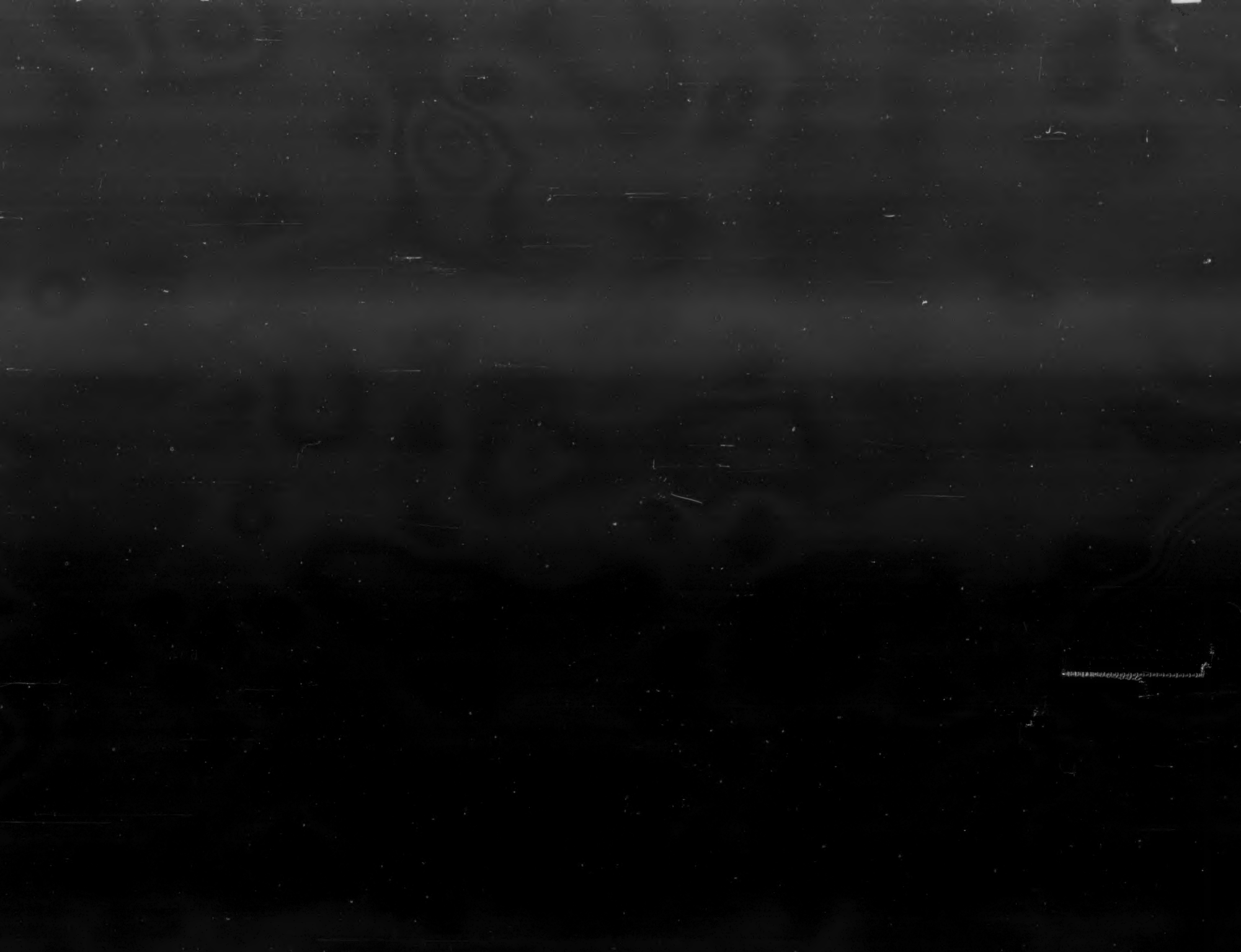
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